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DENTAL COLUMBIAN



ANNUAL PUBLICATION OF THE
STUDENT BODY... SCHOOL OF
DENTAL AND ORAL SURGERY
COLUMBIA UNIVERSITY
MEDICAL CENTER
NEW YORK CITY

· 1939 ·



THE DENTAL COLUMBIAN



THE SCHOOL OF DENTAL & ORAL SURGERY
COLUMBIA UNIVERSITY

To

EWING CLEVELAND McBEATH

whose kindly influence, robust professional ideals and deep devotion to the highest interests of his students has been an aid and an inspiration.



EWING
CLEVELAND
McBEATH,

D.D.S., B.S., B.M., M.D.

Ewing C. McBeath was born in the Lake Superior district of Wisconsin in 1884. High school and a short business course were already things of the past when at the turn of the century he became connected with the office of the district attorney. Soon he became court reporter for that section of the state.

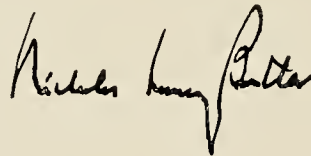
After some years spent in that fashion he decided to become a dentist and enrolled at the University of Minnesota. In 1910 he received his D.D.S. and started in practice at Spokane, Washington. For five years he practiced there giving special attention to Dentistry for Children—one of the first men in the country to do so. The value of a thorough and rounded education, especially for a health practitioner, was ever apparent to him.—And so he went back to his Alma Mater and obtained a B.S. in 1919, a B.M. in 1920 and an M. D. in 1921. Then after an internship plus a year of study at noted European clinics he began the practice of Pediatrics in St. Paul, Minnesota.

In 1929 he left St. Paul to accept an appointment as Associate Professor of Dentistry at Columbia. In 1936 he was made a full Professor and is at present head of the Divisions of Dentistry for Children and Practice of Medicine. It is mainly to Dr. McBeath that our Pedodontia Clinic owes its high standing and from him that Preventive Dentistry has received great impetus. Recently, in just recognition, Dr. McBeath was elected a Fellow of the American College of Dentists.

THOSE who look forward to the practice of dental and oral surgery as a career find themselves increasingly in touch with many of the larger problems of public health. We have only recently begun to learn of the close relationship between general health and disorders of the teeth, however slight. Therefore it is that this particular branch of surgery is one on which just now increasing emphasis should be laid. Preparation for its practice must be thorough and broad, and that general knowledge of medical and surgical science which is so essential as a foundation must underlie the useful practice of this calling.

With every good wish for the students of the School of Dental and Oral Surgery, and for their future usefulness, I am

Faithfully yours,

A handwritten signature in dark ink, appearing to read "Nicholas Longfellow". The signature is written in a cursive style with a large, prominent initial 'N' and a long, sweeping underline.



President of the University

Nicholas Murray Butler
LL.D. (Cantab.), D.Litt. (Oxon.),
Hon. D. (Paris)

WILLARD C. RAPPLEYE

Dr. Willard Cole Rappleye was born in Marinette, Wisconsin, on February 11, 1892, and received his early education in the schools of Wisconsin and his A. B. from the University of Illinois in 1915. He received his M. D. from Harvard Medical School in 1918 and in 1922 Yale University bestowed upon him the honorary A. M.

He began his career as laboratory instructor in Comparative Anatomy and Zoology at Columbia (1913-14). During 1915-17 he held a similar position at Harvard Dental School. In 1919 he went to the University of California as chief of the Clinical Laboratories and instructor in Biochemistry. Later he went East and held the position of Hospital Administrator at Yale until 1925. Dr. Rappleye's connection with Columbia began in 1931 when he was elected Dean of P. & S. In 1933 the University appointed him Acting Dean of the Dental School and Director of the New York Post-Graduate Medical School.

HOUGHTON HOLLIDAY

Dr. Houghton Holliday was born July 9, 1889, in Sanborn, North Dakota. In 1915 he received his A. B. degree from the University of Minnesota. Two years later his alma mater awarded him the D. D. S. Soon after the World War, Dr. Holliday became a member of the staff of the Mayo Clinic in Rochester, Minn. In 1920 he returned to the University of Minnesota to become Superintendent of Clinics and Assistant Professor of Dental Surgery. Five years later he went to China, under the auspices of the Rockefeller Foundation, where for three years he taught Dental Surgery at the Peking Union Medical College. He became affiliated with Columbia in 1928, holding the position of Superintendent of Clinics. In 1929 he became an Assistant Professor and in 1935 rose to Associate Professor of Dentistry, heading the Radiology Department, and instructing in Periodontia. In 1936 he was made a full professor and Associate Dean of the School.

WILLARD C.
RAPPLEYE
A.M., M.D.



HOUGHTON
HOLLIDAY
A.B., D.D.S.

Operative Dentistry



LEROY L. HARTMAN, D.D.S., Sc.D.
Professor of Dentistry

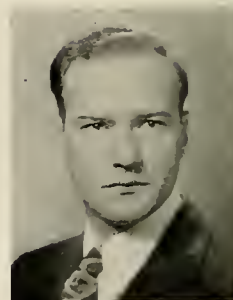


MAURICE BUCHBINDER, B.S., D.D.S.
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CARL R. OMAN, D.D.S.
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EDWARD H. KOCH, A.B., D.D.S.
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THE province of operative dentistry is to treat symptomatically the ravages of dental caries. The existing infection is treated locally in its manifestations in the tooth and an attempt is made to prevent its further spread.

In early times, crude stumbling and superstitious methods were used. Back in ancient Greece when good old homo sapiens had a toothache he ran quickly into his kitchen, emptied his mouse trap and ground the bodies of the freshly killed mice to a powder. He mixed this with ground marble and inserted into the hollow of his tooth. And lo! the pain disappeared and the tooth was filled. The Incas, Aztecs and Mayans prepared cavities and inserted gold, cement and precious stones—and not merely for decorative purposes. Guillemau, early in the 18th century, recommended his improved white wax as a filling material. "White waxe mixed with gumme elemni, white coralle and preparede pearles."

Thus little was known of operative dentistry prior to the 19th century, for the instruments then in use were crude; filling materials impractical and the dentist, no matter how skilled, was unable to make adequate restorations. In the 19th century came workable theories as to the nature of caries; replacement of antiquated instruments and filling materials and methods of cavity preparation. Today, with our knowledge of dental caries gained by unceasing productive research, new developments and improvements in filling materials and with exacting procedures for cavity preparation at our disposal, we are able to attack the problem of dental caries from a rational scientific basis.

TODAY, more and more emphasis is being centered upon the preventive aspects of dentistry. Obviously the logical place to begin prevention is in early life. With this growing realization, the practice of Dentistry for children is becoming a greater and more important phase of dentistry than ever before. Formerly early carious loss of the deciduous dentition, with the resulting mal-development of the facial and jaw bones and mal-alignment and occlusion of the permanent teeth was a common occurrence. Happily that era is on the wane. In the words of Dr. McBeath—"It is both probable and possible that the rapidly growing reverence for and fuller understanding of dentistry for children may eventually so change the perspective of dentistry as to reduce the magnitude of the technical superstructure. Its general contour would be much improved by the resulting symmetry and intimate co-ordination of its many equally important phases. . . . The trend would be toward a more satisfactory orientation of the dental profession as an important adjunct in the science and art of healing."

PEDODONTIA



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RADIOLOGY



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HARRY H. MULHAUS
Technician



EVALD LINDER
Technician



HENRY SAGE DUNNING, D.D.S., M.D., B.S.
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ORAL SURGERY



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ORAL HISTOLOGY

Dental surgery is based upon the same medical and surgical precepts as other phases of surgical practice. It has its remote origins in general medical surgery. Dental ills were in all probability treated along with other bodily ills by the primitive medicine man. The first mention of dental surgery comes from the Egyptians who practiced extraction of teeth. Also among their records are instructions for the reduction of dislocated mandibles.

The Greeks went a step further and devised an instrument for extraction—the odontogagon, a leaden model of which was placed in the temple at Delhi. They performed minor oral surgery. In Hippocrates' writings, we find descriptions of various pathologic conditions and instructions for setting fractures of the mandible which are very similar to the methods in use today. Aristotle and other Greek writers contributed to the dental literature of the period.

Although the Romans did not offer very much to dental surgery, they assimilated knowledge from the countries which they conquered and gave it wide application. The greatest of the Roman writers on dentistry was Celsus, who wrote extensively on all its phases. For loose teeth and cankerous ulcers of the gums, he describes a remedy which was found in the filth of the tail of the sheep rolled up into little balls, left to dry and reduced to powder.

Celsus also described a Roman method of extraction in which the gum was detached all around and the tooth was shaken until it was so loose that it could be pulled out with the fingers. (No anaesthesia.) If this procedure was not successful, forceps were used. In this period there were several classes of men who treated teeth. At the top were the surgeons, who played a part in the progress of dental surgery. The barber surgeons were next below the surgeons. Theirs was also a respectable trade at that time. The lowest was the itinerant "tooth puller," who was classed with the tinkers, bawds, rogues, etc. He did nothing to further dental progress.

In the beginning of the modern period, we find, in Italy, Fabricius describing extracting instruments according to their resemblance to the beaks of animals, e. g., molar forceps or pelicans, rostrum, crow's beak, cagnoli or dog-bite. In France we meet Fauchard, the "father of modern dentistry," who was not only a skilled exodontist who designed his own instruments for extraction, but he also described in detail various pathological mouth conditions. Though King James I used to extract teeth as a hobby, Great Britain lagged much behind the continent in dental surgery. From Great Britain and France came the first American dentists. These formed the nucleus from which dental surgery developed in America. One of the earlier American methods of extraction consisted in the application of the beaks of the forceps along the sides of the tooth and the impinging gingiva. The tooth and the gingiva were removed together.

Modern dental and oral surgery is concerned with careful dissection of teeth and surgery of the investing tissues. The dental surgeon should be qualified to operate on and treat fractures, cysts, diseases of the soft tissues, simple extractions, and impactions.

CHARLES F. BODECKER
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Assistant in Dentistry

ORAL ANATOMY

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PROSTHETICS



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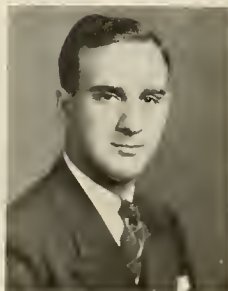
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ON the day that a member of some ancient race conceived the idea of shaping an artificial tooth from the tooth of an animal and by means of wire attaching it to the remaining natural teeth as a substitute for one that had been lost, prosthetic dentistry had its inception. That was many years ago. Since then prosthetics has been constantly refined and improved throughout the years.

It was many years before the mineral tooth was invented. As we have it today, its perfection is but a development of this century. The original method of attachment was gold wire. It is still employed today as a chief means for fixation of partials. Instead of the original elastic wire that was fastened by twisting there has developed the clasp. This has been modified by a system of male and female spring attachments but these are essentially clasps.

Dentures were at first constructed upon bases carved from wood, bone, or ivory. Natural teeth and artificial teeth carved from walrus bone were used. The techniques were unrefined and left much to be desired. Little consideration was paid to fit or harmony of any sort. The awkward spiral intermaxillary springs were used for retention and separation of the dentures. Such important factors as facial contour and tooth proportion received scant consideration.

With the discovery of new materials and procedure, prosthetics took on a different aspect. The use of plaster eliminated much of the haphazardness of impression taking. The vulcanization of rubber for denture bases and the use of atmospheric pressure for retention aided materially in efficiency. The old swaged metal base was thus replaced. But later with the discovery of the casting process, metal was revived again. Today a combination of materials are used. . . . The evolution of the articulator from the plain line hinge joint in 1805 to the various present day intricate anatomical articulators characterizes the growth of prosthetics. Out of a long record of trials and errors, successes and failures, have been distilled fundamental principles. As Dr. Rowe once put it, "There has been a gradual evolution of the practice of prosthesis to the science of prosthesis. The premise that the degree of efficiency of a restoration must be determined by the extent to which the biologic equation has been satisfied may well be considered an established principle. Changes in technique that may develop in the exemplification of this principle are more apt to be coincident with progress than those changes of the past that were based on empiricism."

JURISPRUDENCE AND ETHICS



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ORAL PATHOLOGY



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LEUMAN M. WAGH, D.D.S.
Professor of Dentistry

ORTHODONTICS



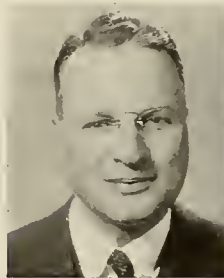
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The first recorded methods of treatment of orthodontic nature were in Roman times. Some orthodontics was done by the Arabs, mostly extraction, filling and wedging the teeth, and this was as far as men advanced until that omniscient Frenchman, Fauchard, devised the expansion arch. However, it was not until the establishment of the first special school in orthodontics by Edward H. Angle in 1900, that this branch of dentistry came into its own.

In 1932 a questionnaire study was made of the instruction in orthodontics in the dental schools of the U. S. and Canada. The majority of the schools agreed that the purposes of undergraduate

orthodontic education were: to give students an appreciation of orthodontics, to train students to recognize cases of malocclusion, to prepare students to prevent malocclusion, to aid them to understand related points in other fields of dentistry and to prepare students to advise patients regarding cases of malocclusion.

At Columbia the purposes listed above are followed and the effort is made to correlate information from other branches of the curriculum. The students are led to understand the dangers inherent in orthodontic treatment unless it is done by one who is thoroughly competent.

PERIODONTOLOGY

Periodontal disease has been with us since the dawn of time, and was the most frequent cause of the loss of teeth in ancient times. Pyorrhea was treated before the development of dental instruments by extraction, because the teeth loosened and were easily removed.

The well known Arabian dentist, Albucasis, who lived from 1050-1122, developed a set of scalers to remove calculus, and similar instruments were used through the Middle Ages. Pierre Fauchard, and Bourdet, both Frenchmen, practiced the surgical removal of diseased tissue in the treatment of pyorrhea, a method that is in use today with but slight modifications.

At Columbia, we are taught the conservative approach to the eradication of periodontal disease, the removal of the sources of irritation and infection and the prevention of the recurrence of such conditions.

ORAL DIAGNOSIS



HAROLD J. LEONARD
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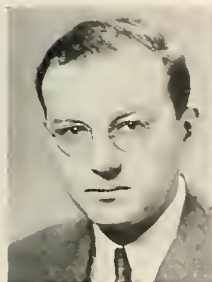
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Clinical Assistant

Diagnosis, prognosis and treatment planning go back to Babylonia where sufferers were brought to the market place and all those who passed by were required to stop and confer with the afflicted and advise the same remedies or treatment that had cured others or themselves. Hippocrates believed that diagnosis should be carried out by deduction from clinical symptoms.

The Curriculum Survey Committee of the American Assn. of Dental Schools published a report in 1935 which stated that, "the weakest link in dental education today is the instruction in diagnosis and

treatment planning." However, Columbia, has had a course in Oral Diagnosis since 1927-28, and in 1931 students were assigned to the Oral Diagnosis clinic. Our school is recognized as a leader in the teaching of this subject.

In the curriculum survey report cited above, it was recommended that diagnosis and treatment planning be unified to emphasize the importance of considering and properly relating all types of dental health service for the patient and to help the student to see the work of the various clinical departments in proper perspective.



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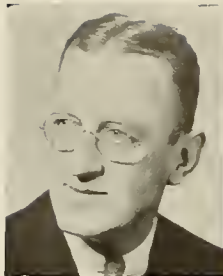
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N. WALKER



M. TSOURAS



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MORRIS SECHTER



HOWARD ROGERS
Technician



MRS. M. G. MCKENZIE
Assistant to the Dean



MRS. A. L. FITZGERALD
Secretary to the Dean

MRS. R. P. AMY



MRS. L. G. SEELIGMAN

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MRS. V. NADON



M. O'LEARY



J. BERMONT



MRS. F. MOORE



E. R. BOYD, R.N.
Anesthetist



M. F. LYNCH, R.N.



C. SCHULTZ



K. KAVANAGH



JOHN C. FREEMAN
Technician



ROBERT WRONG
Technician

CLASSES





CLASS

1 . . .

It's over—and yet just begun . . . and memories upon memories crowd in as we recall those four "so long—so short" years. . . . A hustling-busting seething whirl of activity . . . those preliminary interviews . . . the first registration . . . actually dental students. . . . Gross anatomy and the first glimpse of our profession to be . . . herded into the anatomy lab and told in a matter of fact way to uncover our specimens and get to work . . . furtively watching the other fellow before attempting anything ourselves . . . osteology and that "fissure about the size of a crack which is distal to the posterior part of the lateral aspect of the anterior superior tubercle" . . . the cavernous sinus thrombosis and its relation to hurriedly packing one's suitcase is expounded by Dr. Milch . . . "do you get it?" . . . Hamburg becomes a bespectacled billiard ball . . . "the bahr ahrea" . . . hunting for that elusive vagus while your partner croons out of Gray . . . "I can't identify it, so let's cut it out" . . . the ever ready excuse—it's an anomaly! . . . the hermaphrodite at Sachs' table . . . "an old olympus' topmost top" . . . practicum after practicum . . . afternoons in histology . . . the eternal question—is it ligamentum nuchae or lens paper slyly substituted by our neighbor? . . . lines of Retzius . . . "I'm no artist, that's how it looked to me" . . . the difficulty of defining Scott's tissue and naming its functions . . . Iggy, with, ironically enough, the biggest monocular microscope in captivity . . . we become surgeons, assistants, anaesthetists and scribes . . . the smell of ether is sweet . . . lookout! the cat is loose . . . kidneys have thresholds and the library is discovered and so are the O. H's. . . . unknown to McGannon the boys mark his physiology reports unacceptable—and does he fume! . . . Dr. Diamond carves teeth while standing on a chair with the entire class crowded around him . . . Garretson talks a good upper first molar . . . Dr. Stein insists that not even caries could have produced the misshapen pieces of wax we proudly call teeth . . . we remain undaunted . . . Dr. Erdreich's knives mysteriously begin and continue to disappear . . . Biochem and the usual sugar is dumped into our sample . . . Ca and P have a ratio . . . a walrus moustache stalks around the room . . . comes checking out day and we have more glassware in our locker than when we started . . . catching up on our sleep during Neuro . . . and Dr. Elwyn's pointer descending precipitously . . . the C.N.S. has tracts, centers, olives, pyramids, islands and what have you . . . Dr. Lyons shows us that two reeler . . . Art bases and

OF 1939...

President ROBERT MASON
Vice-President WILLIAM KAPLAN
Secretary-Treasurer SIMEON BLINN
Student Council Reps. LESTER FINKEL
 LOUIS HYMAN
 HARRY QUAIN
 MILTON WECHSLER

weaseling begins . . . the gypsum market soars and floor H becomes white-washed . . . practical Wechsler resorts to a dignified and fitting "white-wing" outfit . . . Schoeneman runs out of plaster and cuts chunks out of the ceiling at home . . . we go social and run a never to be forgotten stag . . . Axelrod becomes renowned for his exposition of the "ordinary tip" . . . Peiser and Scheier have a contest to see who can smoke the most cigars—coming up! . . .

We are saddened and shocked by the unfortunate and tragic deaths of Dean Rowe and Dr. Wiberg. . . .

2 . . .

Before we have time to shake the camphor balls out of our 'scopes Path starts . . . Greenberg diagnoses stomatitis as inflammation of the stomach . . . gumma or tubercle? . . . lectures in pitch black rooms again with everyone fighting for seats next to the slide projector . . . identifying slides by their chipped corners . . . autopsies . . . those conferences with Dr. Kesten . . . Schwartz photographing all the slides in his spare time—3 to 4 in the morning . . . Dr. Rosebury's distinctly unknown unknowns . . . the diabolical delight with which cocci apparently turn into bacilli after we've handed in our report . . . typhoid injections . . . Nonchalantly assuring our first prophylaxis patient that she was our fifty-ninth, no more and no less . . . we do our first extraction with a universal scaler . . . spilling iodine on our patient with Dr. Hughes looking on . . . we are introduced to the full upper and lower . . . kindly Mr. Cross bellows at us when we venture down to G floor to vulcanize our case . . . we wax up that upper ten times . . . Eisenberg running around "my poor case, my poor case. If I only had another twelve months" . . . everybody gathers around to watch some one mis-cast another crown . . . Has anybody seen my Paliney? . . . investing with pumice instead of gray investment and then wondering why it didn't cast . . . Watching, from the roof, the C&B technic being marked . . . A says "yes." B says "no." C disagrees with A and B . . . and with Oral Hygiene we rediscover the library . . . Axelrod enthusiastically crushing bacteria between his teeth . . . Wilson becomes a restaurateur . . . The

National Association of Alopetic Dentists is formed

. . . Dunn, Kaplan, Katz and Scheck are charter members . . . Dr. Lieb demonstrates the proper method of holding *Lepus Cunicilus* . . . prescriptions and the advantages of a classical education . . . the game of rolling pellets and stroking the bunny . . . the efficient Dep't. of Sanitation that flitted around the lab. . . . discussing everything but pharmacology in those conferences with Dr. Lieb . . . heat treatment and the modulus of elasticity . . . elated when we all get exemptions in Dental Materials . . . Operative technic starts Scheier in the old gold business . . . we all conduct research on how to fill a ten rope cavity with six ropes . . . the class cheers when Dr. Hunt announces that the class will go on the floor in operative . . . the first sophomore class to do so in the history of the school . . . We find it takes an hour to put on the rubber dam and another hour to find the instructor . . . State boards . . .

3 . . .

Back from vacation and . . . "Please, please Mrs. Amy can I have a patient?" . . . Still trying to master the technique of applying the rubber dam . . . McCrossen's hair begins to turn grey as he pours new art bases in order to make his bridge fit . . . Dr. Rosebury gives his lecture course on dental caries and we stop eating pilot biscuits . . . Skolnick removes his orthodontic appliances and we find that he has teeth . . . Scheier pulls the plug from the X-ray machine while Mulhaus is giving a demonstration on taking radiographs. . . . Friedman makes the startling discovery that green teeth are not really green at all . . . Ellison makes a classic preparation and Dr. Hunt looks it over saying, "now extend it into the dentine" . . . In diagnosis one of the 55 discover queer eruptions on the tongue only to find out that they are the circumvallate papillae . . . Kaplan leads the class in recasting and swears off class III inlays . . . Prosthetics, and the dentacoll resembles lava flowing out of a volcano . . . Schwartz makes class history as he finishes the first House case . . . and in only four months . . . Round wire technique and Mr. Cross finds that he hasn't any more time to himself . . . Dr. Gillett walks by and 51 pots are carried to the sink to be cleaned up . . .

We learn all about the Eskimos and practice making miniature hairpins that encircle the teeth . . . Kunin, Blinn and Scheck try out their own appliances and end up with malocclusion . . . And in this corner we have a bite of 350 lbs. . . Wilson cuts Oral Path to try and collect old accounts . . . Dr. Hoyt warns that you cannot solder into a hole and Katz goes to the lab and proves that he is right . . . We set up our first set of teeth and Young and Smith Co. "tear them down."

Hamberg does the first class III foil and it stays in for a whole week . . . Mason is elected president and McGannon starts to do his gold work during lunch hour . . . The grades in Round Wire Tech. are handed out and we find that there is only one letter in the alphabet—C . . . Eisenberg has a blessed event and promises cigars, factory throw-outs . . . Granetz dodges around corners to avoid Ziskin and so save his teeth . . .

Crown and Bridge in the raw, where a mistake cannot be rectified upon the payment of 43 cents to Morris . . . Dr. Brichner gives a lecture on Migraine and its occurrence in very intelligent people and 51 students suddenly develop all the symptoms . . . The new Medical Health Building is being constructed and we find it easier to locate the instructors as they intensely watch the excavations . . . Special courses serve a good purpose, they break up the monotony and give us a well needed breathing spell . . . Amid the hustle and bustle of the school the mad race for operative points becomes greater and greater . . . A pretty figure now doesn't always mean a girl . . . The class affair at the Hotel New Yorker and the boys are broker . . . Final exams amid the stifling heat of the beginning summer and another year is over . . .

4 . . .

Back from vacation, bronzed, rested and ready for the last quarter . . . The thrill of occupying the chairs in the senior section of operative dentistry . . . Once more the mad scramble for points in operative dentistry . . . Our first class III foil and the ego is knocked out of our sails . . . We try our pneumatic plugger for the first time and it runs away from us . . . Dr. Oman speaks, "Yes, with a well misdirected blow you knocked out the foil . . . Practice of medicine which brings to our attention how much we used to know . . . Children's Dentistry and we become neurotic from seeing how well our applied psychology fails . . . Morris again asks for more mazuma and we stay home

a few weekends . . . The requirements are posted and no one smiles any more . . . The clinic resembles 42nd St. on a Saturday afternoon . . . The new system in operative and you can see Mrs. Recast on Wednesday if you aren't scheduled for Diagnosis or Surgery, or perio, or what have you, and if your Dr. Do-It-Over is on the floor that day . . . The class forks over for a wedding present and Greenberg takes unto him a wife . . . J. Friedman tries to adjust the rubber dam for his root canal patient only to find that she is edentulous . . . McCrossen is given enough rope to hang himself but instead he plugs a colossal class III . . . Dr. Smith speaks, "Are you proud of this crown Granetz?" "No!" "Well start it over!" . . . Schoeneman spends three hours trying to green stick his vulcanite trays only to find that he is working on Lefkowitz's by mistake . . . Scheier's class III becomes loose so he devises the technique of cementing it back as an inlay and no one is the wiser, until now . . . At Letchworth we will never forget Rothstein with the Finkel "Enigma" on his head . . . The Letchworth Football Team sign up Katz after he gets off a sixty-five yard run . . . Scheier makes a brilliant flying-tackle of the latter and ruins his suit . . . Senior theses become due and we untangle our date . . . Dental Jurisprudence and Eisenberg becomes "Assistant Professor" . . . The grades are received and the smiles again disappear for some . . . Members of the tardy club, Peiser, Cunningham, Lefkowitz, Singer and Scheier; they manage to arrive at Dr. McBeath's lecture on time . . . Dr. Gillett takes his daily walks leaving volumes of notes in his wake . . . The class affair and student and professor rugcut on the floor together . . . Ellison gives free dinners and the year book really gets under way . . . Bonime drops an inlay on his toes and sports crutches for a month . . . Those midnight lectures continue as the audience dwindles . . . Room F207 Tuesday at 5 P.M. "Step right up gentleman, be careful of the bombs and shell torn field, see the largest nerve in captivity . . . The Senior Dinner was one of the high spots of the year . . . The entertaining show, especially the imitations, will long be remembered . . . We will never forget Dr. McLaughlin blowing his whistle on the clinic floor . . . Much credit is due Scheier, the committee chairman, and his capable committee of Friedman, Peiser, and Finkel . . . Work and more work and we feel that we are becoming better and more able to carry on the crusade for healthier individuals . . . To the faculty we extend our sincere thanks for their tireless efforts in trying to carve us into finer and more proficient members of our profession . . .



ISADORE AXELROD

2086 CROTONA AVENUE
BRONX, NEW YORK

B.S., College of the City of New York

Tireless industry and unflagging optimism are the two major ingredients of Axel's personality. We're certain that in time the balance will become still more favorable to success. We'll miss the strident opinions of our colleague Axel, who was always loath to permit a discussion to peter out.



SIMEON BLINN

674 WEST 161st STREET
NEW YORK CITY

A.B., New York University

Alpha Omega

Columbian (4), Associate Editor (3), Sec.-Treas. Class (4).

Si has never been able to deliver an opinion on any matter, however trivial, that was not "weighty." We've certainly enjoyed the delightful ambiguity of some of his harangues in Practice of Medicine. This knack of producing indefinite replies to specific questions should stand him in good stead when confronted by a querulous patient.



IRVING BONIME

25 EAST MOSHULU PARKWAY
BRONX, NEW YORK

B.S., College of the City of New York
Student Council (1), (2).

If we measure a man by those who admire him, Irv certainly rates high, since he possesses more than enough of the basic qualities which all men need for success. His intelligence and levelheadedness gain the respect of all.

JAMES GROWNEY CUNNINGHAM

6 BAYSIDE TERRACE
JERSEY CITY, NEW JERSEY

B.S., St. Peter's College (New Jersey)

Jim is one of those men who is calm and unruffled both exteriorly and interiorly. It will embarrass him to learn he is a thoroughly likable fellow, above speaking ill of his brother student, and possessing talents which will enable him to go far in dentistry.



JOSEPH ANTHONY CUTTITA

316 EAST 31st STREET
NEW YORK CITY

A.B., M.S., Fordham University
Jarvie Society (3), (4).

Joe's most distinguishing and admirable characteristic is the fact that he never gloatingly inquires into your progress, or bores you with his own ups and downs. A fine gentleman, a hard worker at all times, we find Joe one of the most modest and able men in the class.



HAROLD LAWRENCE DATTNER

2344 86th STREET
BROOKLYN, NEW YORK

B.S., College of the City of New York
Alpha Omega

Through the din of clamorous opinions on every imaginable topic, a sharp ear could detect the quiet voice of Hal summing up the entire situation in a few words of wit and wisdom. We have often had occasion to feel that a combination of intelligence and digital skill are important factors in dental practice, and here we must bow to Hal.

GEORGE ERNEST DICKINSON, Jr.

6 MAIN STREET
BREWSTER, NEW YORK

B.S., Hobart University

Good fellowship looms large in George's makeup. With success in Brewster practically assured, let us hope George maintains the high ideals in which he has been steeped these past four years.



CARL DUNN

1837 79th STREET
BROOKLYN, NEW YORK

B.S., New York University
Alpha Omega

Any attempt to belittle the rapid worker as a careless one will fail when we examine Carl's work. He has turned out a considerable amount of work here, and it has been uniformly excellent. With this, his friendly disposition and ability to mingle easily with others should assure success.



HENRY ELLISON

900 WEST END AVENUE
NEW YORK CITY

B.S., College of the City of New York

Alpha Omega

Columbian (1), (2), Editor-in-Chief (4),
Review (2), Ass't Ed. (3), (4).

To an inquisitive critical attitude in science Henry adds a sprightly imagination tinged with humor. Clinically he impresses his patients and co-workers as one who has a sincere regard for the welfare of others. One of the class's most perfect gentlemen, careful students and cultured workers, he stands high in the regard of all.

SOLOMON S. EISENBERG

1675 WEST 9th STREET
BROOKLYN, NEW YORK

Litt.B., Rutgers University

J.D., New York University

Every group of worthy men has had its "Father," and so the Class of '39 has long looked to "Papa" Eisenberg for spiritual guidance and comfort. It is no more than the truth to remind him that he was one of the "first fathers" of the class. We wish him a long and prosperous career.





NORMAN FEITELSON

811 WALTON AVENUE
BRONX, NEW YORK

B.S., New York University

Assistant Photographic Editor *Columbian* (4).

Fido is an example of the photography fiend who developed into an equally ardent dental devotee. With ample outlet for his energy and ingenuity, he has created an enviable record of intra- and extra-oral accomplishments.

LESTER FINKEL

2078 MORRIS AVENUE
BRONX, NEW YORK

A.B., New York University

Stud. Council (4).

Circ. Manager *Columbian* (4).

It is sometimes a rather difficult feat to ferret out those men who comprise the "backbone" of the class. We do not hesitate to put Les near the top of this group. He is always willing to do his share to keep the class affairs running smoothly. He does so efficiently and without fanfare. This, at last, is our opportunity to pay tribute.



ARTHUR S. FRIEDMAN

621 WEST 171st STREET
NEW YORK CITY

New York University

A quiet lad, industrious and unobtrusive, Arthur has ingrained himself firmly into the hearts of those who know him well. His more casual acquaintances must respect him when they recall how few instruments he has borrowed. We hope he will establish a practice which will keep him happy and busy the rest of his days.



JOEL FRIEDMAN

499 LINCOLN PLACE
BROOKLYN, NEW YORK

A.B., New York University
Columbia (4).

An early start in research has augmented Joel's excellent technical record. The ever-searching point of view of the true student combined with a convincing personality will help him make his mark.

GILBERT KUHN GARRETSON

51 STENGEL AVENUE
NEWARK, NEW JERSEY

A.B., Princeton University

Gil has always been one of our sincere students, always willing to devote that bit of extra energy needed to make good work better. He has earned our admiration chiefly through his ability to smile and quip however dark the horizon. This is the most valuable adjunct to the dentist's well-being that we know.



ABRAM BERNARD GRANETZ

64 SOMERSET STREET
RARITAN, NEW JERSEY

B.S., Rutgers

Abe came to our school through a more devious route than most of us. The stress laid on making ourselves worldly-wise was superfluous in his case. As a result of due deliberation and experience in other types of work, he chose dentistry as a career, and applied himself to it with intensity. We all respect Abe and shall watch with interest the development of a praiseworthy career.



ISRAEL NATHANIEL GREENBERG

3769 WILLETT AVENUE
BRONX, NEW YORK

B.S., College of the City of New York

Alpha Omega

Jarvie (3), (4), Vice-Pres. Class (3).

"Iz" has an abundance of quiet self-confidence which has helped him to overcome successfully many obstacles which might have "downed" a man of lesser backbone. He'll undoubtedly extract a good measure of joy from dentistry in years to come.

HARVEY UDEL HAMBERG

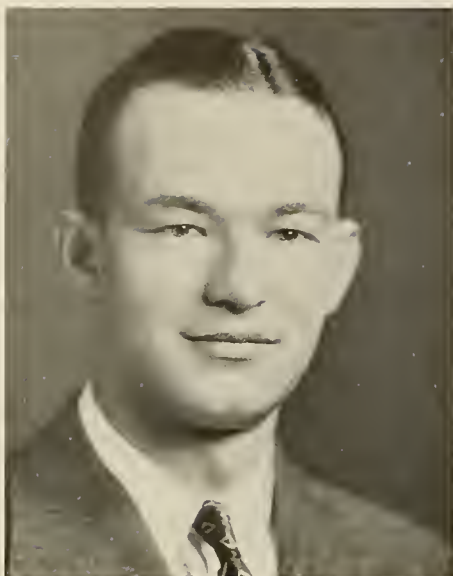
4141 43rd STREET
SUNNYSIDE, LONG ISLAND

B.S., College of the City of New York

Jarvie (4).

We've often had occasion to admire Harvey's handiwork. He is apparently immune to the pitfalls which beset the average student. However, there have been times when we might question his very positive assertions on any matter under discussion. Outstanding ability will carry him to the top.





LOUIS HYMAN

1980 EAST 1st STREET
BROOKLYN, NEW YORK

B.S., New York University

Jarvie (3), (4), Sec't Stud. Council (4).

Lou has certainly had ample opportunity to exercise his penchant for worrying, and has taken every advantage of it—except for certain little inexplicable setbacks such as his election to Jarvie, and the "A's" which keep cropping up in his record, in spite of all he can do.

WILLIAM KAPLAN

1448 WEBSTER AVENUE
BRONX, NEW YORK

New York University

Sigma Epsilon Delta

Class Vice-Pres. (2), (4), Review (2), (3), (4),

Jarvie (4), Columbian (4).

Bill is a man whose skill in technique has concealed from most of us his love of research which cannot die. His fervor in attacking a dental problem, however, is unmistakable, and will be his guiding star throughout many successful years of practice.



ARTHUR KAMEROS

3769 74th STREET
JACKSON HEIGHTS, NEW YORK

A.B., Long Island University

The changes in personality which affected many of us through the stormy years have apparently left Archie untouched. Our first impression of him as a jolly good fellow has never stood in need of questioning. We wish Archie all the success in the world.



THEODORE KATZ

220 MIRIAM STREET
BRONX, NEW YORK

A.B., New York University

Sigma Epsilon Delta

Stud. Council (1), Review (2), (3), (4), Columbian (4).

We like Teddy for his cheery good fellowship, his friendly interest in our affairs, his sense of humor, and his willingness to lend assistance at crucial moments. He has added much to the color of the class, and we hope to see him again.



HANS G. A. KERBER

1077 NEW YORK AVENUE
BROOKLYN, NEW YORK

Brooklyn College

The disparity between effort and achievement can well be noted in Hans' case. He expended least energy in making friends while at school, but through a natural affability and ample tact he has collected a host of men who are proud to be called his friends. They will endure as such for a long time.



ELIAS KOGAN

1543 45th STREET
BROOKLYN, NEW YORK

A.B., New York University

Alpha Omega

Jarvie {3}, {4}.

Eli has found himself early in his career. He knows his forte to be the practical side of dentistry, and has done his best to develop this to the utmost. The outcome has been laudable. He has a creditable record, and cannot fail to add laurels as the years go by.



LOUIS LEONARD KUNIN

928 HUDSON AVENUE
UNION CITY, NEW JERSEY

A.B., Columbia University

Alpha Omega

Review (3).

Lou has been one of the more quiet members of our class, seldom thrusting himself into the affairs of others. His is an everlasting quest for fundamental principles. For him the technical details will be inadequate without an understanding of the purpose behind each step. When Lou gains the high niche he deserves, it will be through this admirable quality.

NORMAN LEFKOWITZ

260 EAST 72nd STREET
NEW YORK CITY

A.B., New York University

Alpha Omega

Close association does not always give us the most accurate picture of the place which a man occupies in a group. However, when we meet Norman after graduation, it will be with a warm glow at the memory of four years of his genial company. We wish him all of the best.





CHARLES EDWARD LOVEMAN

322 WEST 72nd STREET
NEW YORK CITY

A.B., Johns Hopkins University

Advert. Manager Columbian (4).

Equanimity is the dominant note of Charles' character. Never upset, ever interested and sympathetic, he proved himself the sincere friend. His sincerity and ability will carry him far.

EDWARD HAROLD ROGER McCROSSEN

1073 McBRIDE STREET
FAR ROCKAWAY, NEW YORK

B.S., Fordham

Class Sec't-Treas. (1).

Ed has the makings of success in this world—a happy heart, a straight view of the problems, and determination to plow right into the center of the vortex. There is little doubt that with Ed's courage and drive he will not be merely an "also ran."



ROBERT FERDINAND McGANNON

285 ALEXANDER AVENUE
BRONX, NEW YORK

A.B., Columbia University

Class Pres. (1), (2).

Jarvie (4).

Bob's family has contributed largely to his collection of Class III foils. As chairman of the local Lantern Operators' Union, he devised a technique for exhibiting simultaneously three different slides, tampering with the sanity of many a lecturer. We look forward to his recognition as a dentist who will sit high in the councils of our profession.



VICTOR MARCUS

2 SOUTH PINEHURST AVENUE
NEW YORK CITY

A.B., New York University

Alpha Omega

Jarvie Vice-Pres. (3), Pres. (4).

Victor's earnestness and diligence in both classroom and laboratory should be ample reason for the prediction of his future success. Uniformly conscientious and idealistic, he has always been an asset to the class. His qualities of leadership were early recognized.



ROBERT IRVING MASON

456 BELLEVUE AVENUE
YONKERS, NEW YORK

A.B., Columbia University

Class Pres. (3), (4),
Jarvie (3), (4),
Stud. Council (3), (4),
Columbian (4).

Bob's record needs no interlocutor. His classmates have elected him to the highest office in their power to give, the faculty has shown their faith in him, and he has always repaid confidence to the best of his ability. No task too great, no favor too small, he has given graciously of his energy to maintain dental ideals.



GEORGE EDWARD MULLEN

6824 DARTMOUTH STREET
FOREST HILLS, NEW YORK

B.S., Fordham

Psi Omega

Sec. Stud. Council (3).

It is a blessing to go through life without worrying, but to get along without seeming to work is Utopia. George's gleeful chuckle has made him a good audience for the pseudo-humorists of the class. His effusive personality will actively supplement his dental service to Forest Hills.



JOHN FORD NOONAN

610 WEST 115th STREET
NEW YORK CITY

B.S., Fordham

Debonair Jack, the subtle, suave exponent of "swing" and dentistry, has found himself a high place in the regard of his colleagues. Smoothly unruffled, he has turned out fine work so consistently that we regard his success as a foregone conclusion.

MURRAY PEISER

1059 GRANT AVENUE
BRONX, NEW YORK

B.S., College of the City of New York

Alpha Omega
Jarvie (4).

Murray usually expends as much energy taking verbatim notes during lecture as is required in a nine-rope foil. Ridicule from members of the class has been constantly tempered by reference to the Peiser archives on the part of his less attentive colleagues. He is embarked upon a career which we expect to be distinguished by leadership in organization.





HARRY QUAIN

1272 GRAND CONCOURSE
BRONX, NEW YORK

A.B., Columbia University

Alpha Omega

Jarvie (3), (4),

Stud. Council (3), Pres. (4),

Class Sec'y-Treas. (2).

The beloved "Brain" of the class has run off with practically every scholarship and meritorious award the school has to offer, and remains a modest and sincere worker. Many a time we were grateful for a hearty, unmistakable sneeze, which eased the tension of our clinic work, as the whisper, "There goes 'the Brain'" went the rounds.

SEYMOUR ADOLPH ROTH

9315 92nd AVENUE
WOODHAVEN, NEW YORK

A.B., Cornell

Jarvie (3), (4).

With the discovery of his Woodhaven annex to the school laboratory, the enigma under Si's black derby was happily solved after he completed his requirements on the first of April. The difficulty of knowing Si intimately has been well worth while in the long run, for he is the original sincere, solid gentleman from Cornell.



MILTON ROTHSTEIN

417 HART STREET
BROOKLYN, NEW YORK

A.B., New York University

Alpha Omega

Jarvie (4).

Columbian Business Manager (4).

Milt is one of our most genial souls, who can shed ever-present cares easily, and come up with the brightest of smiles. He can put anyone at ease with his engaging personality, and his experience should help him to make the most of his opportunities in dentistry.



MYRON HILLARD SACHS

1720 UNIVERSITY AVENUE
BRONX, NEW YORK

New York University

Mike's mild disposition has not hidden from us his technical skill. We find in his personality characteristics which we believe to be indispensable for successful dentistry—his even temper and ability to discern complex problems intelligently.

ISIDORE MARTIN SAMUELS

249 ELDRIDGE STREET
NEW YORK CITY

B.S., College of the City of New York

Alpha Omega
Jarvie (3), Sec. (4).

"Iggy" is the prototype of the little man with the big stuff. It is his boast that he has never yet had to pump up his chair. He attributes his success at school to the "lift" he gets from the cute little moustache, which gives him confidence and the cute little girl friend who gives him everything else he needs for success.



LESTER SAROFF

630 FORT WASHINGTON AVENUE
NEW YORK CITY

B.S., Long Island University

Alpha Omega

Every group of men has its Beau Brummel, and our Duke from the South is just that, from the tips of his shoes to his equally shiny, wavy hair. Lester has exhibited symptoms of "dropsy" at frequent intervals, but has always been able to improve upon work ruined when an attack came on. Thank heaven broken facings don't come out of the breakage fee! You won't lack a female clientele. Les.



SAMUEL SCHECK

139-94 86th AVENUE
JAMAICA, NEW YORK

B.S., Brooklyn College
Jarvie {3}, {4}.

The struggles of Sam Scheck comprise a saga we have followed with due sympathy and interest for the past four years. Hampered by the rather short twenty-four hour day, he has maintained a high scholastic average while working nights and enjoying domestic bliss in his spare moments. Sam will certainly find private practice a lark by comparison.

MORTON HOWARD SCHEIER

656 WEST 162nd STREET
NEW YORK CITY

A.B., New York University

Review {2}, {3}, {4},
Columbian {3}, {4}.

Morty lives three minutes distant from school, but usually managed to come at least ten minutes late to lectures. His explanation is that his House articulator broke down while making a turn on Riverside Drive. His comedy and imitations served to brighten up the atmosphere of many a lab and clinic period. We see for Morty a very successful and happy practice.





MARTIN L. SCHER

700 LEFFERTS AVENUE
BROOKLYN, NEW YORK

B.S., Louisiana State University

Marty's specialty of quiet efficiency has given him a fine reputation. He has gained the friendship of all and certainly will have many pleasant memories of the years spent at the school.

BERTRAM BERTHOLD SCHOENEMAN

1770 ANDREWS AVENUE
BRONX, NEW YORK

A.B., Alabama

"Smilin' Jack" has cultivated the study of dentistry simultaneously with the following of various diversions to prove that happiness in life comes from a diversity of interests. Glad to do anything he can for you when able, but somehow never able, he is withal well-liked among us. An ardent devotee of social activities, he has contributed much conviviality to the school affairs. With personality and a broad grin behind him, he has nothing to fear ahead.



LEO RICHARD SCHWARTZ

215 EAST 202nd STREET
BRONX, NEW YORK

B.S., New York University

Photographic Editor Columbia (4).

Fame came to Leo when he demonstrated how a given amount of work could be done in half the time usually allotted. He provided himself with ample leisure, no matter how heavy the schedule, and used this free time to as practical an advantage as he could devise. You've gained a great deal from these past four years, Leo. Put it to the best of use.



IRWIN SIEGEL

1700 GRAND CONCOURSE
BRONX, NEW YORK

B.S., New York University



"Oiwini" has demonstrated very well that there is not necessarily a close correlation between loud claims and achievement. Ever conspicuous by his absence during the weasel hours after 4:30, he has yet managed to accomplish a great deal through a native ability to work quickly and well. He has mastered the basic requirement for a successful career.



LEON EUGENE SINGER

13 BARBEY STREET
BROOKLYN, NEW YORK

A.B., New York University

Sigma Epsilon Delta

Occasionally we have felt that the gaining of a desired goal by the less direct and more difficult path is an end in itself, which will pay dividends in the application of the experience to new problems. Leo has worked hard, and gained much. The regard of his classmates and the faculty attest his success.

LOUIS SKOLNICK

1764 CLAY AVENUE
BRONX, NEW YORK

A.B., New York University

Lou has, like the rest of us, found undergraduate dentistry a course which taxes the best of our abilities. In his case, however, the solution of the occlusion problem in his own mouth proves to be one which engaged much of his time, and the ingenuity of many an orthodontist. He has gained one of the most important of psychological advantages—the point of view of the patient.



MATTHEW WARTEL

P. O. BOX 1
MOODUS, CONNECTICUT

A.B., New York University

Alpha Omega
Stud. Council (3).

Matty was the most envied fellow in the class at 9:00 o'clock every morning, when, running up the hall, we would know that the C's and K's had been passed by that Wartel would probably enter the class in time to answer to his name while the poor "top-uns" were stuck. Don't let that fierce moustache fool you. He may look like a scoundrel, but you can safely lend him an instrument and actually expect to get it back. Matty's sincerity and diligence, not to mention his meticulous attention to details, are to be admired.





MILTON WECHSLER

1631 WASHINGTON AVENUE
BRONX, NEW YORK

B.S., College of the City of New York

Alpha Omega

Columbian (3), (4).

Student Council (3), (4).

Review (2), Ass't Editor (3), Editor-in-Chief (4).

Milt has never permitted himself a breathing spell during the entire four years. Every spare moment he could find he managed to fill with new extra-curricular duties. He has the broadened interest of the true educator, and when he becomes a leader in our field, will do much to promote better dentistry everywhere.

JACK WILSON

3054 GODWIN TERRACE
BRONX, NEW YORK

B.S., New York University

Alpha Omega

It doesn't require four years of association with Jack to find that he is the best story-teller we have. His tales of sharpening up a point angle or bending a clasp take on a hilarious character under his masterful touch. Fortunately his fund of stores is inexhaustible, and will tide him over many a strained situation in later years.





CLASS



After preparing a speech of sufficient professional complexity to impress his first patient, Gerry Courtade was stricken dumb when he found that his victim was the equally anxious Sil DelRey. It seems the faculty felt that all of us could still profit by continued study of the practical fundamentals. Our first clinical experiences consisted of rubber-dam applications and Dentacoll impressions with the worst possible patients, our fellow students. Who chipped the teeth off Marchand's casts?

Chet Kupperman was his old exacting, meticulous self in Crown & Bridge—it took him only 9

hours and 46 opinions (including the porter's) to position his anterior pontics. Dr. Hoyt finished the job, and Kupperman is still worrying. We all appreciate the helpful hints and practical assistance that the Crown & Bridge department gave us. Dr. McLaughlin gained a lot of valuable experience in unsoldering bridges.

Ray O'Connell practically talked his labial arch wire into position in Orthodontics. We all learned to hold cherry-red wires in our fingers, without having the sense to drop them. Paul Sexauer got so far behind he had to do nearly all the technique in the last two lab periods.

OF 1940

President ——— JOE LEAVITT
 Vice President ——— TOM SWEENEY
 Secretary-Treasurer — R. CARSON
 Student Council Reps.. A BUCKELEW
 P. SEXAUER
 L. ENTELIS



Lennie Cohen took 80 minutes to put the rubber dam on his first clinic patient, and just 30 seconds to rip it with his first bur cut.

Tom Sweeney developed the black paper and threw away the films in Radiology and Mr. Mulhaus diagnosed it as a grave overexposure. Tom Geraghty was no end surprised when he had to make 14 rerays on his first full-mouth series.

Johnny Esposito had his locker filled with the snap impressions of prosthetics patients who came in just once and then decided they'd rather "gum it" than do a chew-in. Art Kafka is still holding up the festooning on his first clinic case in order to see what the final lip drape of his unfortunate patient will be.

Dick Carson sold the patients a thorough going-over in Diagnosis while Alexander whispered in the other ear that he could get it for them wholesale.

Nils Nordstrom, our Swedish thrush, sang "HI HO, HI HO, to Perio I go!" as if he had written the song. "We got more practice in 'letting out the bad blood,'" quoth Feldman.

Correlation courses took us back to our first two years and we found that we were expected to have remembered Anatomy, Bacteriology, Pharmacology and Pathology for longer than a week after their final exams. It was easy for Jesse Ehrenhaus and Myers — they just went to their card files. Rabinow slept in the library as usual

while doing Community Dentistry and Diagnosis assignments.

Even Reznick speeded up to match the pace that was set in Round Wire. Weinberger, our hard-luck boy, nearly went crazy over the exactness required of us in Porcelain work. Don Smith ended the year without finger nails—you can't scream with vexation when you get stuck.

Things we'd like to see: Clune with enough patients; Buckelew working with one hand behind him; Weinrib, Stang, Strickler and Spatz without a lab bench in front of their lockers (who's a weasel?); a style show featuring Leavitt and Entelis; Lynch and Rosenbloom without their pipes; a rival for our Strong Man, Marty Smith; a day with about 36 hours so Wetrogan could figure in some sleeping time; an exhibit of Reiss's portraits of our profs.; Kanya's winnings at pinochle; the announcement of the engagement of the inseparables, Feinstein and Mandel; a high-chair for Ray Schultze.

We still claim to be the most melodious and convivial class in the school. Our stag affair at the end of the first trimester and the Faculty-Student dance were the highest spots of our social program.

Now, suave veterans, we hope to return next year to carry on the traditions of our departing preceptors, the Seniors, whom we salute.

...CLASS OF



Battle-scarred veterans, we returned for our second year with a nonchalance born of many zero hours midst bursting shells of postganglionic impulses, myostatic reflexes, etc.

Pathology was known vaguely as the course where, absurdly enough, students were required to remember Histology. Besides this unreasonable demand on our feeble minds, it really was a swell course. There always was a terrific fight to get a seat in back of the lantern during Dr. Kesten's slide descriptions. The only one who sat there consistently was Dr. Jarcho, but he didn't take notes. Then, of course, there were the memorable lectures on Queen Ann's umbilicus and Swell-foot Oedipus Rex.

Prophylaxis merely proved the old thrift adage about the amount of interest that could be aroused by a small deposit.

Phagocytosis, antigen-antibody, a-tisket a-tasket. Was it red—oh, no, no, no— just a gram positive bacillus! This may give our gentle readers a faint picture of the cerebral complications in a student wading through that ten-ton handbook that was the Bacteriology text. Not that it didn't make good reading, especially if you had thirty years to spend on Devil's Island. After reading a few chapters of this at one clip there was a complete divorce of mind and body that made a



1941

President	W. SPENGEMAN
Vice-President	S. FINKELSTEIN
Sec't-Treasurer	A. MUND
Student-Council Rep.	J. JACOBSON
	L. DAUGHERTY



slap-happy pugilist look like an Einstein. As a result of this terrific punishment a peculiar new disease cropped out among the students, due to the X-Virus. Its symptoms are unknown and etiology almost as obscure as caries. This mysterious plague is found wherever the Tstutsugehockta flies live. The virus passes through eighty-three life cycles in the fly's body, during which period it may assume the forms of an agar slant, a quiz, or a bludgeon-blow on the head. These simple stages are continued when a fly bites an elephant, which is the next vector. Immediately after the bite, the elephant disappears into the jungle to a secret valley where he joins his ancestors. Why he should want to join his ancestors, or where the virus goes after this is still unknown. The world awaits the newer experiments on this scourge.

Prosthetics and Operative brought us to a closer contact with dentistry than before. The making of a full denture presented no great problem. Anybody within forty steps of the schedule was considered a weasel. The articulator is a simple apparatus; all it needs is a gallon of Esso to be driven home. One might envision the articulator of future years being dragged in on greased logs by several laboring students. Then picture a sophomore of generations to come, climbing to the top of his articulator, dizzy from the height,

getting his protrusive relation with the aid of a crow bar. But why go on?

The boys kept on plugging and soon classes one to five inclusive were filled and polished.

Radiology gave us a new view on teeth. As a matter of fact, we never really had such an inside view before.

1875° F! We were fused with joy. Yea, liquified with delight! Gold melted in Dr. Crawford's furnace and heat of fusion was no more! What a delectable curve that would make!

Pharmacology and the dear little bunnies. Why did those with classical backgrounds write such poor prescriptions. O Tempora, O Mores!

Oral hygiene sent the boys scurrying from alcove to alcove and shelf to shelf. J. D. R., J. A. D. A., Dent. Cosmos all felt the prying eyes a-thirsting for knowledge. Caries, the price of civilization! Would that we were our aborigine ancestors ambling through the forest primeval without a single carious fissure. But then, who would need dental care? So it's really all for the best.

In keeping with our reputation, we had the usual quotas of beer parties, dinners and dances, all of which were highly successful.

Thus, another year has passed; a year of hard work and fun. Let us hope all our years to come will be so replete with satisfaction and enjoyment.



CLASS

Late in September, 1938, the School of Dental and Oral Surgery took unto itself the class of '42. A great disappointment awaited those of the incoming class who imagined that, having successfully coped with the problem of carving a sphere, they were dentists. First there was anatomy, and concurrently with it, histology; all proving that an aptitude test does not make a dentist.

In the collective freshman memory there are several outstanding "firsts." Perhaps it was a portent for the future, but the first day in school the class was given a test. The first white coats, with neatly-lettered, red-embroidered names caused many a sunken chest to swell with pride. And the first anatomy lab did much to expel that air quickly from the lungs. Set apart in a place of honor in that same memory is the wistful ghost of the first beer party. There the class learned about women, professors and Life.

Meanwhile a class election had been held. From a murky atmosphere, thick with shouted slogans, rash promises, electioneering and posters, emerged the officers for the first year. Al Hagstrom took the presidency; and to serve with him the class chose Joe Blumenthal as vice-president, Doris Mosesson as Secretary and Joe De Rose, Student Council Representative.

And so, as time passed, class history began to appear. There are the tales of leaping livers and splashing spleens in anatomy; the "liggy

nuchae" bugaboo of histology will still make many quiver apprehensively. Exams came and exams went. Fraternities rushed the class. Finding free food and beer available, the class rushed the fraternities.

Besides being assimilated into fraternity life, the class, together with the august and sedate sophomores, held a dance at the Hotel McAlpin Grill Room, where there was much merriment and wassail.

The first trimester drew to a close, which meant more examinations. Afternoons in the bone-room were succeeded by evenings there; these gave way, in turn, to nights spent boning the bones. In the histology laboratory, too, ardent devotees of the microscope attempted to commit the course to memory. Quickly the term was over; a new one began.

At last the class was introduced to a dental subject, and each individual sat down to carve a career (and a set of teeth) for himself. In biochemistry the cooking of scallops and the preparation of brain soup taught the freshmen the true meaning of "cook-book chemistry." Yellow stains on more than one lab coat will long keep the memory of cats and physiology alive.

Sometime at the end of May the class will gather for a dinner. That will be the last freshman function of '42.

From the routine of classes and labs, recitations, quizzes and examinations certain "characters"

OF 1942...

President AL HAGSTROM
Vice President — JOE BLUMENTHAL
SecretaryDORIS MOSESSON
Student Council Rep.. JOE DE ROSE

emerged in the class: Joe Blow Maximow . . .
Daily-Bailey Rosner . . . "Solid" Lou Drucker . . .
"Burlesque" Julie Weinrib . . . these contributed
to relieve the tedium.

The beginning of the second year awaits us.
Morituri te salutamus.

Freshman classes always have that hungry
look. Therefore, as soon as the dental neophytes
were initiated into the mysteries of "Air Raid,"
they formed a society of their own, the HUCS.
This society meets weekly in the third vulcanizer
from the window to discuss ways and means of
not being HUCS.

The full quota, or more, of "character" is represented
in the class. Musically, the swing boys
are Rosner, Drucker and Blumenson. Chief "burly"
for the time being is blushing, shy, modest, Julie
Weinrib, but it is rumored that several others are
nearing his records. The distinction of being first
to the altar falls to Si Blumenson. Title of best
all-around beer guzzler goes to Bert Gerzog, who
firmly entrenched himself in that position at the
beer party.

No one will ever know the exact outcome of
the frosh-soph baseball game. The frosh claim
they were cheated; the sophs say they were
gypped; the umpire had his teeth pushed in and
isn't talking; and after totalling the scores, the
score-keeper discovered that he was late to a
meeting in Podunk and left post-haste.



ACTIVITIES





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DENTAL COLUMBIAN

Our four years here have been memorable. Accordion-like, they seemed, at first, to stretch out for ever so long and then—swish! They folded up into almost nothing. It has been our purpose in this Dental Columbian to capture that elusive and evanescent "swish;" to portray in a permanent fashion the host of big things and innumerable little things we have all experienced. Throughout we have attempted to amiably and artistically combine the immediate with the lasting and the serious with the light. An attempt, too, has been made to depict the progressive nature of modern dentistry; this, in the hope that it will animate each of us to strive not only for personal accomplishment but for the further advancement of the dental profession.

The practical considerations of limited time, energy and budget have necessarily played important roles in shaping the final cast of the book. But, withal we have tried to make the most of our resources. It has been a pleasant task.

Since the production of this Dental Columbian is necessarily a co-operative endeavor it is fitting

that mention be made of those who so wholeheartedly gave of themselves. Through the generous assistance of Dr. S. N. Rosenstein the many financial and editorial problems were successfully co-ordinated. To Milton Rothstein, Charles Loveman and their assistants goes the credit for so solving the budgetary problem as to finance not only the Columbian but also contribute to the support of the Review. The fine photography was made possible through the painstaking efforts of Leo Schwartz and Norman Feitelson. The detailed and very necessary editorial material was ably handled by Joel Friedman, Morton Scheir, Ted Katz, Bill Kaplan, Si Blinn, Milt Wechsler and Bob Mason. Credit too, is due the underclassmen who so freely helped whenever needed. We are grateful to the Oral Hygiene staff for their ready co-operation. We are indebted to the American Association of Dental Editors for enabling us to obtain Dr. Kronfeld's article. And finally may we express our appreciation to Mr. H. Deckoff of the Tribune Press for his many excellent suggestions.

The Editor

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Never before has the REVIEW been so enthusiastically received by the students and the Faculty. The reason? A large cooperative staff, willing to devote itself toward producing an outstanding journal worthy of the support of the School.

This year, every effort has been made to make the REVIEW more readable, to publish material of greater interest to all its subscribers, and to improve its appearance.

The first issue presented a new, dignified, and beautiful cover design, as well as the new feature, "Meet the Man." One of the articles in this number, entitled "The Federal Health Services," presented important and interesting material, and was reprinted, almost in its entirety, in the Journal of the American Dental Association.

The second issue consisted of fewer pages, but contained a wealth of material. Abstracts of seven of last year's senior theses were printed, thereby presenting the results of many student research projects which otherwise could not have been published.

The third issue brought forth another innovation in "The Faculty Presents." This was designed to replace "With the Associations," and aims to give the essence of papers presented by faculty members at the various meetings. The feature article of this number was especially well written, and presented important, and new, data on "Deciduous Teeth in Congenital Syphilis."

The last issue of the year was a nicely balanced and well-rounded number. It was the only issue to present two Senior theses almost in their entirety. A much commented on article was the reprint of C. N. Johnson's "My Creed."

The REVIEW has this year progressed most markedly as a student journal. Its exchange list now numbers over sixty, and is constantly increasing. This means that the journal of the students of the School of Dental and Oral Surgery of Columbia University is becoming more and more familiar to the profession throughout the greater part of the world.

STUDENT COUNCIL



STUDENT COUNCIL

HARRY QUAIN	President
ROBERT MASON	Vice-President
LOUIS HYMAN	Secretary
HENRY W. GILLETT	Faculty Adviser
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PAUL SEXAUER	ALBERT BUCKELEW

SOPHOMORE CLASS

WALTER SPENGEMANN	ALVIN MUND
SELIG FINKELSTEIN	

FRESHMAN CLASS

AL HAGSTROM	JOSEPH DE ROSE
-------------	----------------

The Student Council as usual has followed its policy of bettering student-faculty relations; considering student problems and, if necessary, presenting them to the faculty. It also continued the practise of acquainting the student body with its proceedings by means of reports read before the several classes by the class presidents, and in cases of sufficient importance has sought to ascertain student sentiment by submitting various proposals to a vote of the student body.

The Council has made several noteworthy achievements during the past year. The "P" and "F" system of grading, which was authorized last year was put into effect. However, each class was given the option of determining whether this or the conventional system of grading should be applied.

The faculty has adopted the procedure of making available to the students the findings of

the annual physical examination. Beginning next year, the Kline test which, heretofore was available to the student, on request, will become a routine part of the physical examination.

The student room was considerably improved by the addition of new furnishings and decorations donated by the school and the students.

For the first time, as a result of the efforts of the faculty, a reception room on the Columbia College campus was set aside for the graduating class of the Dental school on commencement day.

Under the guidance of the Council, the School entered a team in the intra-mural basketball competition.

Finally, the Council sponsored the Second Annual School Dance which was held at the Beekman Towers Hotel. This affair, like its predecessor, was a tremendous success.

INTERFRATERNITY COUNCIL

Alpha Omega: J. M. Leavitt, M. Peiser
Psi Omega: G. L. Courtade, A. R. Buckelew
Sigma Epsilon Delta: L. Singer, I. F. Stang

The Interfraternity Council is composed of two representatives from each of the three fraternities. It is under the able guidance of Dr. McLaughlin who is the faculty adviser. Its function is to act as a governing body for the fraternities and it also encourages friendly relations and cooperation among the fraternities.

It usually meets several times in the early part of the school year. At this time, it formulates plans and regulations for the "rushing" period of each fraternity.

The main objective of the Interfraternity Council is to see that no conflict occurs during the rushing periods. So far, this objective has been attained.





WILLIAM JARVIE SOCIETY

President	VICTOR MARCUS
Vice-President	MORTON WEINRIB
Secretary-Treasurer	ISIDORE M. SAMUELS
Faculty Adviser	DR. SCHROFF

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WILLIAM KAPLAN	SEYMOUR ROTH
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VICTOR MARCUS	SAMUEL SCHECK

JUNIORS

MORTON ALEXANDER	CHESTER KUPPERMAN
ALBERT BUCKELEW	JOSEPH LEAVITT
GERARD COURTADE	RAYMOND O'CONNELL
JESSE EHREHAUS	IRWIN STANG
ARTHUR KAFKA	MORTON WEINRIB

SOPHOMORES

IRVING KITTAY	ALVIN MUND
JACK KLATSKY	ROSS RILEY
MELVIN MORRIS	

"The importance of a scientific and research point of view in professional and educational problems"—this in brief explains the existence of "Jarvie." Founded nineteen years ago by men who may be considered the pioneers of dental research, the society stands today, still imbued with the same ideals of its founders. It is the aim of the Jarvie Society to awaken the desire of every dental student to study, to question, to delve into what we know and what we don't know, and to be eternally critical.

With this concept in mind, the inauguration exercises were dedicated to the Freshman class and all freshmen were invited. The body was addressed by Drs. Bodecker, Diamond, Holliday and Schroff. Each in turn stressed the importance of entering and going through dental school with the "research point of view." We feel that this meeting was as inspiring as it was informative, and that it did much toward orienting the dental neophytes in the correct manner. It is the sincere hope of the present group that this event serve as a precedent for future inaugurations and that future Freshman classes may enjoy them as did the class of '42.

At its second annual testimonial dinner the society this year paid tribute to its founder and guardian through the years, Dr. William J. Gies, at the Roger Smith Restaurant, 40 West 41st Street, on March 15, 1939. The Jarvie Society, the greater part of the dental faculty, the original Jarvie group and a goodly number of the student body were present. The Society presented Dr. Gies with a Jarvie Key. We feel that more meetings of this character could go far in bringing our profession to the level it justifiably deserves. We wish Dr. Gies many more years of happiness and thank him truly for his able guidance and inspiration.

The society feels that it has definitely justified its existence this year and hopes that the following classes will follow its precedents. In a large measure its success this year was due to the efforts of Dr. Joseph Schroff, the first president of the Jarvie Society and now its faculty advisor. His true interest has served to impel us to efforts we undoubtedly would otherwise never have expended and we wish to take this opportunity to offer our profoundest thanks and hope that he may serve the society in his present capacity for many years to come.

OMICRON KAPPA UPSILON

Omicron Kappa Upsilon is a national honorary dental fraternity which was formed twenty-five years ago by the members of the Faculty of Northwestern University Dental School for the purpose of setting before dental students a goal or standard of perfection towards which they might strive. As stated in the Constitution of the Fraternity, their objective was one of "encouraging and developing a spirit of emulation among students in den-

tistry and to recognize in an appropriate manner those who shall distinguish themselves by a high grade of scholarship."

The Epsilon Epsilon Chapter was granted its charter in 1934 at the Columbia School of Dental and Oral Surgery, with eleven members of the Faculty as Charter members, Dr. William B. Dunning being the first President of the Chapter.

President	DR. H. W. GILLET
Vice-President	DR. E. B. HOYT
Secretary-Treasurer	DR. I. L. HUNT

CHARTER MEMBERS

ADOLPH BERGER	HENRY W. GILLET
CHARLES F. BODECKER	MILO HELLMAN
HENRY S. DUNNING	ANNA V. HUGHES
WILLIAM B. DUNNING	HAROLD J. LEONARD
LEROY L. HARTMAN	ARTHUR T. ROWE*
	* Deceased

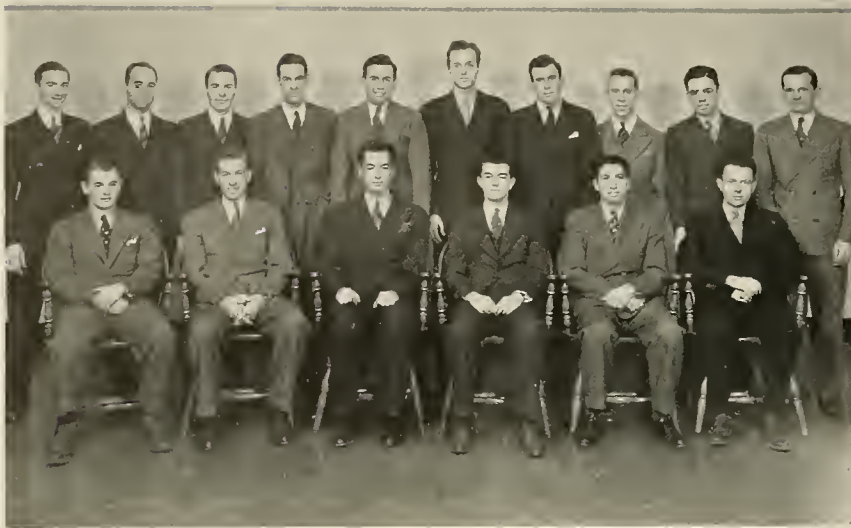
LEUMAN M. WAUGH

New members are selected each year from the graduating class on the basis of scholarship, character, and activity in school affairs. An additional number, chosen from the Faculty or from among the Alumni of Columbia University who distinguish themselves in the profession, are honored each year with membership in the Fraternity.

The following men were inducted into Omicron Kappa Upsilon at the last convocation exercises held at the termination of the last school year: active (from the Faculty): Drs. C. R. Oman, M. R. Miller, E. T. Murphy, H. U. Barber, A. C. Totten,

and T. S. Callaway; associate (from the Class of '38): K. Shapiro, L. B. Shapiro, N. M. Sheckman, and I. C. Stower.

Since the selections for the fraternity are not made until the final grades are recorded, the **Dental Columbian** is not in a position to say who has been honored. To those who will be thus rewarded we tender our congratulations. The fraternity looks forward to the time when she will be able to reward those other members of the class of '39 who will distinguish themselves in dentistry, be it in practice, teaching, or research.



PSI

GERALD L. COURTADE, '40.....Grand Master
 ALBERT R. BUCKELEW, '40 Junior Master and Editor
 THOMAS P. GERAGHTY, '40.....Secretary
 JOHN A. ESPOSITO, '40.....Treasurer
 GEORGE E. MULLEN, '39..Chief Interrogator and Chief Inquisitor
 SILVO A. DELREY, '40.....House Manager

MEMBERS

JAMES G. CLUNE, '40
 LAWRENCE DOUGHERTY, '41
 GERARD W. MARCHAND, '40
 MARTIN I. SMITH, '40
 SALVATORE P. GULLI, '41
 ARMAND R. CAPUOSO, '41
 WALTER J. JAGODZINSKI, 41
 WALTER G. SPENGEMANN, '41
 WESLEY R. BERT, '41
 JOHN J. NEEDHAM, '41

OMEGA . . .

GAMMA LAMBDA

Psi Omega is one of the largest of all dental and professional fraternities. An international fraternity, it has over nineteen thousand members and thirty-six active chapters. The first chapter was organized in 1892 at the Baltimore College of Dental Surgery.

Its primary objectives are the advancement of the dental profession and the affording of assistance, inspiration, and benefits to the individual member, through planned educational programs and fellowship. Paramount among the advantages of membership in the organization is the privilege of hearing informative and interesting addresses by prominent men, many of them former active members successful in the various fields of practice or instruction.

During the past year the members of Gamma Lambda were fortunate in securing some very eminent men as speakers, among them being Dr. William Hopkins Crawford, Dr. William Bailey Dunning, and Dr. H. T. McMahon. In connection with some of the addresses there were interesting exhibits and illustrative moving pictures and educational features.

Various social affairs were held throughout the year to most of which members of the faculty were invited. This includes the holiday parties, just before Thanksgiving Day, Christmas, and New Year's Day as well as our annual formal dance. Thus contacts with men whose experience and insight might well be considered indispen-

sable to the young professional man are made available to the members both before and after graduation.

Foremost among the benefits to be derived from membership in Psi Omega Fraternity are the opportunities to make warm friendships, the periods of enjoyment and relaxation afforded by the various functions, and the inspiration of being a part of an organization whose aims are high and far-reaching.

Following graduation the friendships made while in dental school may be perpetuated in the alumni chapters of Psi Omega. When a dentist is a Psi O he is more apt to keep up with the advances in his profession and be more interested in it because of the broadened horizons opened to him.

During the past year Gamma Lambda has been fortunate to have such men as Gerard L. Courtade, John A. Esposito, and Thomas P. D. Geraghty as its leaders, all elected in their sophomore years to the posts which they have so admirably filled. Gamma Lambda has but one member in the class of 1939 but he is of such character that we do not feel we missed a great deal in not having a greater number from his class. He is a past Grand Master and the type of man we are all proud to have as a brother. The members wish to thank him for his contributions to our fraternity life during his four years here at school and to wish him every success in the future.



SIGMA

ARNOLD W. HARRISON.....	Master
ALBERT H. WEISENFELD.....	Chaplain
SAUL L. FLIEGEL.....	Scribe
LESTER ENTELIS.....	Treasurer
WILLIAM O. STRICKLER.....	Outer guard
IRWIN F. STANG.....	Inner guard
RAYMOND D. WOLF.....	Historian

CLASS OF 1939

THEODOR KATZ
WILLIAM KAPLAN
LEON E. SINGER

CLASS OF 1940

LESTER ENTELIS
IRVING FEINSTEIN
SAUL L. FLIEGEL
ARNOLD W. HARRISON
ISIDOR MANDEL
IRWIN REZNICK
IRWIN F. STANG
WILLIAM O. STRICKLER

CLASS OF 1941

LEONARD E. KOENIG
RAYMOND LEVAO
SIDNEY MELNICK
IRVING J. NAIDORF
PHILIP SILVERSTEIN
ALBERT H. WEISENFELD
RAYMOND D. WOLF

PLEDGEES

JESSE BERL, '41
IRVING KITTAY, '41
JOHN E. PRITZ, '41
WILLIAM BERMAN, '42
BERTRAM E. GERZOG, '42
ALVIN MOONEY, '42
JACK TOPOLSKY, '42

EPSILON DELTA

GAMMA



Thirty-four years ago, the Sigma Epsilon Delta fraternity came into being. Its founders pledged themselves toward the fostering of good fellowship, the maintenance of high scholastic standards, and a spirit of helpfulness in the dental profession. Through the ensuing years, it has served as a tremendous factor in encouraging the creation and exchange of these concepts.

Today, this organization has become national with undergraduate chapters at the Universities of Columbia, New York, Pennsylvania, Temple, and Maryland, and graduate chapters in the cities of New York, New Jersey, Philadelphia, and Maryland.

Social activities for our chapter during the year included several gatherings at the house with Christmas and New Year parties as the high spots during the winter season. We participated in the annual Sigma Epsilon Delta convention of January 28, held at the Hotel Pennsylvania.

This year we have been experimenting with a system of study groups and pre-examination discussions which have proved highly successful in aiding the students in their work. As in the past,

we have helped the freshman overcome the hurdles of the first year course.

Our educational activities have included lectures by professional men prominent in their field. Dr. C. J. Henschel delivered a talk on "Office Management." Dr. Sidney Reisner spoke on "Temporomandibular Articulation." Dr. Salmon showed pictures on "Apicoectomy." Professor Greenfield gave a lecture on "Radiology." Dr. J. R. Schwartz presented his noted exhibit on "Prosthetic, Crown and Bridge, and Operative Appliances." In addition, we had the opportunity of seeing motion pictures on full denture technique. The meetings of our New York Graduate Chapter held every month at the Hotel Pennsylvania, have served the purpose of bringing about a more intimate relationship between the dental profession and dental student. In this manner, we as students have become cogizant of the responsibilities which will confront us as dentists.

The fraternity extends its heartiest congratulations and best wishes to our seniors, William Kaplan, Theodore Katz, and Leon Singer for fruitful and happy careers.



ALPHA

Chancellor	RUBIN RANKOW
Vice-Chancellor	JACK KLATSKY
Quaestor	JESSE EHRENHAUS
Scribe	WILLIAM GRAUER
Historian	JOSEPH LEAVITT
Praetor	DR. HENRY FINK

1939

SIMEON BLINN
HAROLD DATTNER
CARL DUNN
HENRY ELLISON
ISRAEL GREENBERG
LOUIS HYMAN

ELIAS KOGAN
LOUIS KUNIN
NORMAN LEFKOWITZ
VICTOR MARCUS
MURRAY PEISER
HARRY QUAIN

MILTON ROTHSTEIN
ISIDORE SAMUELS
LESTER SAROFF
MATTHEW WARTEL
MILTON WECHSLER
JACK WILSON

1940

MORTIMER ALEXANDER
WILLIAM GRAUER
ARTHUR KAFKA
JESSE EHRENHAUS

CHESTER KUPPERMAN
JOSEPH LEAVITT
RUBIN RANKOW
ROBERT REISS

MORTON WEINRIB
ALVIN WEISS
JOSEPH WETROGAN

1941

DAVID BERMAN
CHARLES CHAYES
ULYSSES ERDREICH
BERT KLATSKIN

JACK KLATSKY
MAURICE LOEWENSTEIN
MELVIN MORRIS

PLEDGES

HARRY BARRER '42
HAROLD BLANK '42
LEONARD COHEN '40
LOUIS DRUCKER '42
LOUIS FISHER '42

BERT BROMBERG '41
VICTOR GROMET '42
JOSEPH LUBAN '42
RICHARD PASTERNAK '42
JOSHUA ROSS '42

NORMAN TANZ '42
JOSEPH WOLF '42
ROBERT WEBER '42
LESTER ZACKHEIM '42

OMEGA

ETA



Alpha Omega, an international dental fraternity, was started 32 years ago in 1907. With a roster of only two chapters at its inception, Alpha Omega now numbers 33 chapters with a membership of almost 5000 men, whose domain lies not only within the borders of our own country, but also extends into those of our neighbor to the north, thereby assuming an aspect which is international in scope.

The functions of the Fraternity are expressed in its ideals of: fraternalism, scholarship and professionalism. Briefly, it endeavors to aid the individual in developing lasting, worth-while friendships, to impress upon its members the extreme importance of scholarship, and to inculcate in the dental student an appreciation of high ideals and professional attitude in Dentistry. Eta chapter was founded at Columbia in 1910 and has been dedicated to the actuation of these ideals. Its dynamic history, its rapid growth, and the present activity of its members well exemplify the high personal standards and fraternal spirit upon which the organization was founded. Alpha Omega is a permanent institution to its members. Graduation does not necessarily mean the end to fraternity life. Our Alumni chapters are well organized, function efficiently, and maintain close contact with the undergraduates.

The Fraternity accomplishes its aims by holding weekly business and entertainment meetings, fre-

quent socials at the chapter rooms, 910 Riverside Drive, and regular formal and informal affairs and banquets during the year. At more or less regular intervals, guest speakers on dental or general subjects are invited to speak before the group. During the past year, the N. Y. Alumni group invited Eta and Iota Chapters to participate in a clinic held at the Hotel Pennsylvania. Eta Chapter offered demonstrations of school techniques and personal hobbies. Alumni clinics on varied dental specialties provided an invaluable correlation between theory and practice.

Banquets are held each year in honor of the graduating members, the pledgees, and the initiates, while an annual formal supper dance, attended by Columbia and N. Y. U. undergraduate members, Alumni and Faculty members are also included in the year's formal activities. The affairs this year were held at various hotels and banquet rooms; the formal supper dance at the St. Moritz, the initiation banquet at the Roger Smith, and the pledgee banquet at Bonat's Restaurant.

We are particularly proud this year of the varied activities of Eta chapter of Alpha Omega and feel that it has earned for itself a definite place on the list of worth-while activities.

To the senior members, who are now graduating, we offer our most sincere and fond wishes for success and happiness.

FEATURES



DENTISTRY AS A PROFESSION

By Houghton Holliday, A.B., D.D.S.

Dean of The Columbia School of
Dental and Oral Surgery

In medieval days dentistry consisted almost entirely of "pulling teeth." The barbers exercised this function and as a result the dentistry of that period has been referred to as "barbaric." Adequate preparation for dental practice during that period may have consisted of a physical education program. Dentistry in the United States is just reaching its one hundredth birthday and there have been many changes since those "barbaric" days. Following the establishment of the first dental school in Baltimore in 1840, the course of training developed rapidly along technical lines, and dentistry came to be recognized for its high degree of mechanical skill. Later the importance of a thorough foundation in the biologic sciences was recognized, and today the course of training requires academic study covering four years of special instruction after the pre-professional college preparation. Dentistry has become a profession. In fact dentistry regarded itself as a profession all through this period of development and desired to have others regard it as such. There certainly were times, however, when it had all of the earmarks of a highly skilled handicraft and little resemblance to the dentistry which we justly regard as a profession today.

What are the distinguishing characteristics of a profession as compared to other vocations? First, a relatively greater degree of intelligence is required. The professions are known as "learned professions" and these is no such thing as an "unlearned profession." They are learned because they have their roots in cultural and idealistic soil. Preparation for a profession requires a long period of training, and a measure of maturity. One can begin to learn a trade as an apprentice at the age of eighteen or younger.

The professional man can not make errors in judgment or technique without serious consequences. The physical well-being and frequently the life of the individual is his responsibility. A plumber may make a mistake that causes some inconvenience but is not likely to result in any serious consequences.

Professional men engage in and rely upon the results of research. The results of research in a professional field are made available to all members of the profession. New processes developed in the laboratories of corporations are carefully guarded as trade secrets.

Business is conducted primarily for private gain. A profession has no function comparable to its duty of guarding the public welfare. In business the ideal is value received, in a profession the service rendered has greater worth than any monetary reward. In business the buyer must beware. On the other hand, the patient or client must be able to rely absolutely on the integrity of the professional man.

Apparently the profession demands a great deal of itself and of its members. There is a distinct responsibility to society and to the individual, and the training is not a matter of a few weeks but of a lifetime.

Does dentistry qualify as a profession? It seems to me that it does, but, alas, not all dentists are professional men any more than all lawyers or all physicians. There are some men practicing dentistry who, because of their background and training, will never be able to conform to the criteria for a profession. Men have undertaken the study of dentistry without being aware of the tremendous amount of energy that is required to retain even the education received before graduation. The continuance and supplementing of this instruction has never been considered. Then, too, there are those who have done excellent work in college but following graduation, with no objective subjects upon which to work, waste their time and have become intellectually lazy. As the years go by and practice grows, they find themselves knowing less than when they started.

There has never been a class in dentistry more carefully picked or better trained than this class. There may be an excuse for some to be still practicing "barbaric" dentistry, but for you, dentistry must always be a learned, honored, and skilled profession.

PLEASANT JOURNEYS

By E. C. McBeath, D.D.S., B.S., B.M., M.D.
Professor of Dentistry

It is not easy today to live happily and contentedly in these uncertain times with their rapidly changing customs and ideas, particularly if one feels obligated to follow the commonplace and conventional routine of his predecessors. Their days were surrendered to the continued and conscientious application of limited knowledge gained within only the few short years of professional college training. They were wholly engrossed in mechanical endeavor and felt they had fulfilled their mission in life if, through uninterrupted devotion to their limited fields and submergence of individuality, they had eked out a comfortable existence for themselves and their progeny. Perhaps living, in those days, even with hard work, was more comfortable than today, and people were kinder and less covetous; perhaps it was possible to acquire wealth in one form or another with the prospect of its future availability and satisfaction from its use. Conditions today demand that we wage an intensive fight for existence, righteous or unholy, and to keep fit we must seek relaxation each day, conventional or unconventional. We are not sure of tomorrow and should feel justified in dividing each period between sunrise and sunset into allotments to time for work and diversion from it. We should learn to live by the way and make the best use of our time for productive labor and productive play. In other words, for happier, more successful and profitable living, we must look about us. We, as dentists, have selected our work; therefore, let it demand just so much of our time and leave the remainder for a diversion which provides us with the greatest pleasure. This choice requires deliberation and self-analysis. The time will be well invested if we find some form of escapism which will transport us into an atmosphere of real enjoyment, in directions other than those leading to our daily work. For some, these directions must be widely divergent; for others they must not wander far afield, and again, many are so constituted that these directions must be closely paralleled, within hailing distance. For such as these who are not disposed to stray far from the beaten path of livelihood endeavors into too-diverting surroundings, I would point out that the present-day dental school training supplies a wealth of material for effective use in this adjacent territory. The objective of such a supplemental course as Practice of Medicine applied to Den-

tistry, with its constant application of knowledge gleaned from early study of the basic sciences, is the development of a keener sense of perception and observation. Its theme is "Look about you!" These ever professionally-minded individuals should begin by leaving the monotonous confines of the four walls of their offices and, to make this departure less abrupt and the adjustment less difficult, first stroll through familiar territory and in their own company, looking above and below their usual line of vision and listening attentively. They will soon become aware of many interesting sights and sounds heretofore unnoticed. This expanded utilization of the senses should not be limited to inanimate things; mental note should also be made of the passing and mingling human beings encountered, their individual differences as to general appearance, carriage, gait, arrangement of wearing apparel, facial expressions, voices, attitudes toward others, remarks heard in passing, etc. The stroller will soon be conscious of an increased interest through the awakened senses of seeing and hearing and a very sharply stimulated sense of humor which will buoy him up for the rest of the day. As a result of these excursions, he finds these new exercises becoming more and more effortless and gradually enriching his working hours; he begins to discover many new sights around him and finds himself unconsciously and systematically appraising his patients physically and mentally. Consequently he is developing into a proficient health service worker and a much better dentist; life in general seems more worth while and he regards each day as another new adventure. Accumulating interests and increasing desire to grasp the full significance of his observations prompt him to become well informed and self-sufficient. This emancipation from a dependence upon his former mentally-stagnating associations and habits, rather than rendering him unsocial, furnishes inspiration for a discriminating choice of conduct and of professional and social companions; he becomes happier in the conviction that he is better equipped to make his contribution to today's progress. Very little time and expense, important considerations to the young practitioner, are required for this cultural expansion. The small investment provides such enriching dividends that it should be made *now*.

Just a few suggestions for easier and happier living!

THE RELATIONSHIP OF ORAL PATHOLOGY TO PRACTICE

By Lester R. Cahn, D.D.S.
Associate Professor of Dentistry

In the last month or so my attention has been called to the fact that two dental internes in two different hospitals have been instrumental in diagnosing leukemia from oral symptoms. This is extremely gratifying to one teaching the subject of Oral Pathology. It shows that students are beginning to apply their instruction to clinical problems and the importance of fundamental medical knowledge to the dentist. Another extremely important thing in this connection is the favorable impression cast upon the physicians associated in these cases. There is no way better in which the medical profession can be made to realize the importance of dentistry than by showing the physicians that dentists are well equipped scholastically to take over the treatment and diagnosis of diseases of the mouth. Incidents as recorded above aid materially.

It is well to say that dentistry is more or less a mechanical therapy—so for that matter is surgery. Yet in order to be a good surgeon one should be a good physician basically trained in pathology and physiology. The same holds good for the dentist. He should be just as well trained fundamentally as the surgeon. The reaction of

tissues to injury is the same in the mouth as it is in any other part of the body. The only difference being that anatomical situations alter the clinical symptoms.

It is well to construct a beautiful prosthetic restoration but it would be useless to place it in a diseased mouth. One would not build a house on a mud foundation.

One word about the dentist's responsibility in preventing cancer: it is known that in the majority of instances cancer in its earliest stages is a local disease and as such can be eradicated and cured. It is also felt that irritation plays some part in the causation of malignant disease. It is therefore necessary for the dentist to be able to recognize malignancy in its incipency and to keep the mouth free of irritation. He will be able to do this only when he understands the pathology of cancer and it is felt that the dentist should be as well grounded in cancer pathology as is the physician. When he is so trained he will be able to enter the lists to fight against this dreaded disease.

Sir William Osler once said, "As is our pathology, so is our practice."

STUDENT GOVERNMENT AT COLUMBIA

By Donald J. McLaughlin, D.D.S.
Assistant Professor of Dentistry

The present year will see the end of the ninth successful term of the Student Council of the school. Originally organized in 1928 for the purpose of "fostering a more intimate relationship between the faculty and the student body, and assisting in the improvements of the institution in order that it may be the foremost school of the profession," it was not until 1931 that it actually began to function as an organization. That year the council functioned with thirteen student members and two faculty representatives.

Self-government by the student body through representation on a council has been in vogue for many years in colleges and schools throughout the country. Rules and regulations made by the faculty must of a necessity be imposed on the student body, but there are many affairs in connection with student life that can be more successfully coped with by student self-government.

Our student council has "supervisory and if necessary final control of class and inter-class activities and all functions that may be considered extra-curricular." That just about covers everything except faculty rules, and places a great amount of responsibility on the representatives of

the various classes. Fortunately these responsibilities have been well shouldered throughout the years.

It is interesting to peruse the minutes of the organization. In the early years, cost and loss of instruments, laundry, and publications occupied a great deal of attention. For several years a course in gas anesthesia was an apparition. Later a clamor for student comfort grew and thanks to Dean Holliday a student room was provided. Loss of instruments still was an issue. All throughout the figure of Dr. Gillett hovered about reminding of cleanliness and order.

From time to time attempts have been made to embroil the student body in outside activities that would take valuable time from their studies. These attempts have met with failure because a well-balanced council, following dental school tradition of having level-headed representatives, has maintained its equilibrium.

Whether the original founders realized the importance of their statement of purposes or not, we are beginning to see evidence that our school may be the foremost school of the profession.

RESEARCH AND THE FUTURE OF DENTISTRY

By Rudolf Kronfeld, B.S., M.D., D.D.S.

Research, to most dental practitioners, either means nothing at all, or is associated with a general, hasty exodus of an audience from a dental meeting when it is brought to discussion. This statement is not intended to be facetious but merely summarizes the observations of a decade of varied research activities.

There are several causes for this attitude. To some extent the responsibility rests with those research workers who are inclined to speak "another language" than that of the audience or readers, and who are not inclined to abandon their sphere of pure science. Another cause is a general lack of appreciation and knowledge on the part of the dental profession of the role that research has played and will continue to play in the development and progress of dentistry.

As a rule, everybody is inclined to overlook the fact that our present and future are inseparably linked with research. Our present world with its cities, its means of transportation, its industry and its farms, has not simply grown; it is the composite result of years of scientific research, of laboratory experiments, analyses, statistics, and of comparisons of methods and materials, which led to the selection of the most efficient and satisfactory practical procedure. This process of investigation continues, older methods are constantly being rejected and newer and better ones discovered to replace them.

In modern dentistry much is taken for granted that would not exist were it not for basic research work. The dental practitioner, for instance, who prepares a cavity and invests and casts an inlay utilizes first of all Black's fundamental research on cavity preparation. He then uses inlay wax, investment material and gold that have been tested and approved by the Bureau of Standards and by the research laboratories of the leading dental manufacturers. Does the practitioner realize how many failures, how much loss of money and time he is spared because the material does perform as he anticipates? The same lesson is applicable to any other phase of activity in dental practice. Drugs, anesthetics, denture and filling materials, X-ray films, instruments—all have been thoroughly tested and approved by research laboratories and have been made as efficient and foolproof as possible.

Biologic research has laid the foundation for correct diagnosis and the proper treatment of dental and oral diseases. It matters not how strongly some method of treating a dental or oral disease is recommended by an enthusiastic clinician or manufacturer; unless this method is based on the fundamentals of chemistry, physiology, histology, and pathology, it will fail and soon be forgotten. Treatment of the pulp and of the periodontal tissues will be successful only if the pathology of these tissues is carefully considered. Too often, however, just the opposite method is followed: somebody devises or recommends what he thinks is a method for the "cure" or "eradication" of some lesion or condition, and then creates his own "made-to-order" tissue pathology in order to justify the clinical method in the eyes of his fellow practitioners. This procedure should be emphatically discouraged. There are many conditions and diseases of the teeth and mouth, the causes of which are unknown. There are good methods of treatment that can be relied upon, the exact working of which is not fully understood. The members of the dental profession should be made aware of the fact that an honest admission of lack of knowledge is far preferable to a pseudo-scientific, unsound explanation.

The education of the dental student is constantly being improved. In the past, the basic sciences were for the most part considered an undesirable hurdle, which the dental student tried to jump over hurriedly in order to begin filling and extracting teeth in the clinic. Nowadays it is sometimes actually possible to arouse the interest of a class of dental students in such subjects as dental histology. This is very encouraging. In the future it will no doubt be easier to talk to a dental audience on a research subject and to encounter understanding and appreciation. The International Association for Dental Research has done much through its numerous divisions and sections to coordinate research activities and to stimulate interest in them. The rapid growth of this organization promises to create a closer tie between research worker and dental practitioner, and to be a beneficent influence on the development of a scientific basis for modern dental practice.

THE SCHOOL OF DENTAL AND ORAL SURGERY COLUMBIA UNIVERSITY

... A History

To fully appreciate the forces which produced the School of Dental and Oral Surgery of Columbia University of the present day one must understand the opposing cross-currents which pervaded dentistry several decades ago. The dental profession was just beginning to receive a measure of recognition. It could not attain its full dignity until it had weeded out the quacks, closed the proprietary schools, terminated commercial control of its journalism, and put across to the practicing dentist the ideal of preventive dentistry rather than restorative dentistry. This last idea was and is fundamental; in fact, the whole future of dentistry depends on whether it shall be chiefly a preventive science or only a restorative art.

Dentists were needed who would have the pre dental education and scientific background to understand the pathology of the mouth and also have the ability to attempt to find the fundamental causes. These were the men needed to guide dentistry to a position on a par with that of medicine.

Thus in 1916, through the active co-operation of Drs. H. W. Gillett, F. VanWoert, H. S. Dunning, W. B. Dunning, L. M. Waugh and W. J. Gies, two students in dentistry were admitted to the newly established School of Dentistry of Columbia University in the College of Physicians and Surgeons. These students were admitted on the basis of two years of pre dental or pre medical work in an acceptable college. Columbia was the first school to do this and up to 1923-24 was the only school to require more than one year of pre dental work.

The original idea of forming a dental school in close proximity to and in co-operation with a medical school could not be attributed to any one man. The principle of instilling in dentists and dental students an understanding of the nature of the close relationships of oral manifestations to systemic diseases and the need for a good grounding in the fundamental medical sciences and in scientific research had occurred to a large number of professional men before that time. However, to Dr. Gies may be attributed the driving power which prevented the idea from becoming a still-birth. Thus on March 5, 1917, the Columbia School of Dentistry received its charter as of September, 1916 from the New York State Board of Regents.

At that time, the dental school was located in the medical school. In 1920 a small 3-story annex was erected for the use of the dental school. Clinical dentistry and the technological subjects were taught there. The medico-dental subjects were taught in the medical school by members of the medical faculty.

The original course had been planned so that it would be practically identical with the medical course during the first two years and besides leading to the degree of D.D.S. would also facilitate elective extensions, by individual graduates, for the degree of M.D. However, the charter granted by the New York State Board of Regents stated that, for the D.D.S. degree, dental courses had to be given in the first two years and therefore, in 1920 the program was adapted accordingly. At about this time (1917), the New York Post Graduate School of Dentistry was formed and equipped, ready for work under the direction of Louis J. Weinstein. At the same time, the New York School of Dental Hygiene was formed at Hunter College under Louise C. Ball. Both of these institutions were absorbed by Columbia University and their courses affiliated with the Dental School under the administrative auspices University Extension.

Columbia was the first dental school to give courses for dental hygienists.

During the period 1918-20 the dental school was ignored by the War Department because of the smallness of the student body and for all practical purposes the school did not exist. When the school reopened in 1920 there were four students, the only upper classman being Dr. J. Schroff. Thereafter, the student body increased annually until in 1922-23 it consisted of 20 students.

The course received by those few original students was an excellent one since it amounted to almost personal tutelage by masters of their fields. Lectures were given by Drs. Gillett, Waugh, VanWoert, and Dunning in their offices. Medical courses were taken in the medical school. Clinical and operative dentistry were given in the 3-story annex erected in 1920, with money from the William Jarvie Fund, established in 1916.

In 1923, the Columbia School of Dentistry amalgamated with the College of Dental and Oral Surgery of New York. Officially, the College of Dental and Oral Surgery dates back to 1905

but the school can be traced back to 1852 when the legislature of the State of New York incorporated the New York College of Dental Surgery to be located in Syracuse. This school can be traced thru various names and locations up to 1905 when it received the name and charter it was to retain until its union with the Columbia School of Dentistry.

Thus in 1905, the College of Dental and Oral Surgery of New York located at 216 W. 42nd St. was an independent, proprietary school. Admission to the school was based on a Dental Student's

Certificate, for which three years of satisfactory high-school work was needed. The school offered a three year course culminating in the degree of D.D.S.

According to the bulletin of the school, courses in anatomy, physiology, histology, operative dentistry, prosthesis, etc. were offered. However, the courses relating to the medico-dental aspects were grossly neglected.

About 1902, an announcement appeared in the bulletin stating that the course would be extended to 4 years in accordance with the program of the



National Association of Dental Faculties. After appearing for a few years, this announcement disappeared again until 1916. In 1916, it was announced that the course would be extended to four years beginning with 1917 and in that year the plan reached maturation.

On May 28, 1913, the school moved to its new building at 302 E. 35th Street near Second Avenue. In 1922-23, the buildings at 309 E. 34th Street were acquired.

During the one or two years preceding the Carnegie Foundation's investigation of dental schools, the trustees of the school seeing the need for being rated highly by these investigators, began to put certain improvements into the school. According to the bulletin the medico-dental courses were greatly enlarged and extended.

However, investigation showed that although some of the physical facilities were fairly good, the grade of instruction was very poor. Also, despite the fact that it was called a non-profit-making organization, it was in reality a profit-making organization. Hence the Dental Education Council, in agreement with the findings of the Carnegie Foundation investigators were forced to give it a Class C. rating.

This meant that the College of Dental and Oral Surgery of New York would be forced out of business unless it could amalgamate or be associated with a University. The Officers of the College, understanding this situation, conferred with the representatives of Cornell and Columbia Universities regarding possibilities of union. Finally Columbia University was selected and accepted. On July 1, 1923, the Columbia School of Dentistry and the College of Dental and Oral Surgery of New York were united, by the gift of the latter to the University. The net accredited value of the latter was \$445,185.59—the largest gift to the University recorded in the President's report for the year 1923-24. The fact that the College of Dental and Oral Surgery of New York had died a natural death should not minimize the value of that event, for that gift was a great boon to the Columbia School and to dentistry as a whole. Columbia acquired the two large, well-equipped buildings on 34th and 35th Streets.

To quote from the Carnegie Foundation Report "... the School has been in effect a combination of the spirit of the original Columbia School (1916-23) in the body of the College of Dental and Oral Surgery of New York (1905-23), the university School having been moved into the buildings of the independent college, and the two original names replaced by one intended to memorialize that of the older unit in the amalgamation."



Up until 1923-24 Columbia admitted students only on the basis of two years of collegiate pre-dental work. However, owing to the lower entrance requirements of the College of Dental and Oral Surgery, the entrance requirements were lowered for one year to allow those students already admitted to the College to pursue their studies. The requirements were raised again after a year. Thus during that year the seniors had been admitted on the basis of a high-school certificate, while the juniors, sophomores and freshmen were students on the basis of one-year of col-



AMPHITHEATRE

LECTURE HALL



legiate predental work. The students from the original Columbia school, having had at least two years of collegiate predental work, were distributed among the larger groups in the three upper classes from the older school.

After the organization of the original school in 1916, it was placed under the supervision of a special administrative board composed of the Director of the University Extension, the Dean of the Medical School and five professors of dental subjects of instruction, one of whom was chairman of the board and chief executive of the school, the "Director." This administrative organization was continued.

Up to this period (1923), the Columbia School of Dentistry hadn't been given a rating by the Dental Educational Council. A rating was again postponed pending reorganization of the school. However, the scheme under which it was placed

did not fare as well as had been anticipated. Progress was not made quickly enough. Improvement in educational quality was not as great as was expected, owing to a lack of a sufficient number of well-paid, whole-time instructors of broad experience and ability. In 1926, however, in recognition of the development then in progress, the school was given the Council's "B" rating.

In September 1928 the school moved up to the Medical Center. Since then no radical changes have occurred. However, this does not mean that the school has remained in a static state. Its curriculum is constantly being changed to meet the modern trends in dentistry. Its course has constantly been uphill. It has recently innovated one of the most progressive programs for research in the dental field and leads most schools in this activity. Needless to say, it has attained an "A" rating and is now one of the foremost schools in America.



to quicken the student's interest in the problems of dentistry
to provide him with an opportunity to experience research methods
to enhance his critical sense in the evaluation of dental literature
to augment his dental knowledge

THE SENIOR THESIS

Under the immediate supervision of Dean Holliday and with the help of individual advisers in the field selected, each senior presented a thesis representing original reading, scientific research or both. In the presentation of these theses our class has derived great benefit. It is our hope that some real contributions to dental knowledge have been made. We gratefully thank Dean Holliday and all the various sponsors for their kindly guidance and ever-ready aid.

Following are presented digests of the senior theses.

Balanced Occlusion in Natural Dentition

Sponsor: DR. CRAWFORD

by L. E. SINGER

In an effort to determine whether balance exists in the natural dentition, and in order to find the relationship between protrusive balance and overbite, casts of mouths possessing a full complement of teeth were mounted on an adaptable articulator. By means of check-bites, the movements of the mandible were translated to the articulator. Overbite and overjet was measured. Balance, if any, was noted, and the amount of opening in various excursions of the mandible was recorded. In this survey, 16 cases were studied; only two cases of positive balance were discovered. In these two cases there was no overbite, while in the remaining cases, the overbite varied from 1½ to 5½ millimeters.

The conclusions arrived at were: (1) that balance in the natural dentition is more the exception than the rule; (2) in order to have balance when overbite is present, a fairly marked Curve of Spee must exist; (3) further that balance in the natural dentition is not only unnecessary but would be a detriment to the efficiency of the prehensile and incisive action of the anterior teeth.

• • •

Dentistry in Ancient Times

Sponsor: Dr. MILTON MILLER

by S. A. ROTH

A review of all the available literature and specimens of work regarding dentistry up to the beginning of the era was done. It seems that the ancient Indian civilization—3500-2000 B.C.—was the most advanced in dentistry, even though the earliest in existence. The Egyptians, Greeks, Romans, and the minor ancient civilizations did not advance as far as India. In fact, it may be said that these European civilizations profited by the Indian, instead of the opposite view as usually accepted.

In general we may conclude that modern dentistry has not benefited at all from what has gone before. This is readily understood when we consider that the interval of the Dark Ages destroyed all dental progress and it was afterwards necessary to start from the beginning. Dentistry of the 14th Century was behind the earliest ancient work in its quality and progress. It was not until the last century that any real advance was made that is equal to the ancient Indian civilization.

• • •

The Correlation of Clinical Diagnosis and Microscopic Histopathology

Sponsor: Dr. ZISKIN

by GEO. E. MULLEN, JR.

The object of this paper is the study of pulp pathology, not only from the clinical aspect and microscopic slide but more important, the relationship between the two.

Cases were taken from those patients who presented themselves at the clinic complaining of toothache and where it was known that the tooth was to be extracted. Upon completion of a clinical diagnosis the pulp was removed from the extracted tooth and a histopathological diagnosis was made. The correlation between the two was then noted and studied.

These facts revealed one important consideration, namely that generalized statements about pulp pathology cannot be found in most cases. People that suffer from acute conditions seem to wait for a sufficient length of time till the picture is one of chronicity. The typical acute stage at best seems to be transitory. We wish to stress the point that from our work we feel that no sharp line of demarcation can be drawn between one type and another of pulpitis. Most cases will be microscopically a combination of different stages. In other words the only generalized statement concerning pulp pathology

should be "don't look for a text book picture clinically or histologically but rather keep the diagnostic eye open for the exceptions," if they may be considered exceptions.

GENERAL CONCLUSIONS

1. Normal regressive changes exist in every pulp which may assume such character as to assimilate an acute pulpitis, yet on microscopic examination the pulp tissue is normal.

2. A diagnostic histopathological picture of acute pulpitis is difficult to discover.

3. Peridental membrane symptoms may appear clinically to come from the pulp.

4. It is difficult to define a hard and sharp line of demarcation between acute total closed pulpitis and acute partial pulpitis.

5. Microscopically the condition of gangrenous or degenerative pulpitis is the easiest to diagnose.

6. Too much weight cannot be placed on the patient's history or in making a diagnosis based chiefly on odontalgia.

7. The clinical diagnosis and histopathological findings are at variance more than in agreement.

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A Study of Offensive Breath

Sponsor: DANIEL E. ZISKIN

by: WILLIAM KAPLAN
THEODORE KATZ
MYRON H. SACHS

The thesis was divided into four parts: one paper described the anatomy, physiology, and physics of the sense of smell; a second paper made a survey of the various physical methods for the determination of odor concentrations; a third paper made a complete study of the literature written to date on the subject of halitosis; and the fourth was a clinical study of the causes of offensive mouth odors from a dental viewpoint.

The latter portion of the study consisted of the examination of the breath, by the olfactory sense, of two hundred and eight patients who passed routinely through the diagnosis department. The findings in this survey disclose many interesting conclusions.

1. Twelve percent of the cases examined were truly inoffensive; all that could be detected at a distance of six inches from the patient's mouth was warm air. Of the remaining eighty-eight percent, or truly offensive breath, sour, putrefactive, and tobacco odors made up seventy three percent. The other thirteen percent was due to onion, medicinal and candy odors.

2. There is a definite trend toward halitosis with increase in age.

3. As concerns the hygiene and caries, there is a significant increase in fetor oris when there is a condition of poor hygiene and active decay.

4. Heavy smokers, that is individuals smoking more than ten cigarettes a day or its equivalent, have a great percentage of bad breath indicating that tobacco is a definite cause of halitosis.

5. A heavy coating of the tongue was found to be a very definite factor in causing bad breath.

6. Mouthwashes, and dentifrices of the general proprietary type, and chewing gum were found to be of little or no value in removing bromopnea.

7. The time of day, between 9 A.M. and 4 P.M. showed no correlation with the offensiveness of the breath.

8. A study of abnormal conditions of the gingivae which included marginal gingivitis, periodontitis, and Vincent's infection, indicated that these conditions were important factors in causing offensive breath.

9. No characteristic odor was found in menstruating women, which is contrary to the general belief that an offensive "onion-like" odor could be detected in these women.

10. Women as a group suffer from less bad breath than men.

11. When the mouth mirror was lightly passed over the mucous membrane of any part of the mouth, especially the tongue, a sour odor could be detected when the mirror was smelled. This odor was present whether or not the patient had an offensive breath.

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Deciduous Dentition in Congenital Syphilis

Sponsor: Dr. ZISKIN

by HAROLD DATTNER

The purpose of this report is to present the findings in the deciduous dentition in congenital lues, and to apply the newer knowledge of tooth formation and calcification to correlate these observations. Cases were selected from the Vanderbilt Clinic where these patients were given anti-luetic treatment.

The complete findings in the experimental and control groups were charted. Some of the factors considered were eruption time, root resorption, occlusion, shape, hypoplasia, pitting, caries index, etc.

Although delayed eruption in congenital lues was observed by early investigation, no case was found in the study. X-ray examinations of the cases failed to indicate any change in the resorption time.

The findings question previous observations indicating higher caries frequency in congenital luetic cases.

No case of Hutchinson's tooth in deciduous teeth was found although many authors have described them.

Except for pitting in enamel, no really significant differences were found to exist between the deciduous dentition of children with congenital lues and a control group not similarly afflicted.

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Adamantinoma

Sponsor: Dr. CAHN

by ARTHUR S. FRIEDMAN

The adamantinoma is an epithelial tumor arising from ameloblasts or cells capable of forming the tissues of the enamel organ. The tumor may be solid, cystic, or solid and cystic. The tumor is malignant, although of a low degree. There have been nine cases of metastases reported. There have been some 400 cases of adamantinoma of the jaw reported, slightly less than 85% of which have occurred in the mandible. There have also been some 55 cases of adamantinoma of the hypophyseal region and seven cases of adamantinoma of the tibia. There have also been reported one on the upper lip, one in the orbit, one in the antrum, and one in the ovary.

The theories of the etiology of adamantinoma of the jaw are:

1. Overgrowth of the enamel buds.
2. Surplus enamel buds.
3. Invagination of the oral mucous membrane.
4. Epithelial debris.
5. Remnants of the enamel organ.
6. Certain types of dentigerous cysts.

The adamantinoma occurs equally in males and females. 70% of the cases were first discovered in patients between the ages of 10 and 35.

The etiology of adamantinoma is today unknown with the exception of the knowledge that some dentigerous cysts develop into adamantinoma. What stimulates the primordium to growth is unknown.

A Study of Mandibular Third Molar Flaps

Sponsors: DR. SCHROFF
DR. ROSEBURY

by: HENRY ELLISON
GILBERT GARRETSON

This study was undertaken to

1. Determine the relationship of various factors to the occurrence of third molar flaps.
2. Establish the significance of the flap as related to pericoronal infection.

The cases were divided into three groups: I—Non flap cases; II—Flap cases without active or previous pericoronitis; III—Flap cases with active or previous pericoronitis. Data was obtained by means of clinical observation, history, roentgenographic and bacteriologic examination. Findings were listed according to following factors: age variation, average post-eruptive time; degree of eruption; position; relation to 2nd molar; crown size; relation to ramus; flap size; condition of surrounding bone; bacteriology; relation to antagonist; occlusion; soft tissues.

General Conclusions

1. The mechanics of insufficient space distal to the 2nd molar necessary to accommodate the third molar, account in the main for the occurrence of third molar flaps.

2. Occurrence of the flap can be judged according to the ratio between the distance from the distal of the 2nd molar to the inner border of the ascending ramus and the mesio distal width of the third molar:

when this ratio was 1.2 or greater, no flap was found
if it was 1.1-1.2, a small flap was usually found
if 1 or less than 1, a large flap was found

3. The size of the flap is modified by the degree of eruption and to a lesser degree by the alignment or position of the third molar.

4. The presence of flaps has no significant effect on the bacteriological findings in the third molar area. Apparently, other features such as mouth hygiene, flap biting or lowered oral resistance change an uninfected flap to an infected one. (Pericoronitis.)

On the basis of our work, the following are our recommendations for treatment of favorably aligned, flapped third molars with pericoronitis:

INDICATIONS	TREATMENT
1—Space ample to accommodate tooth; post-eruptive time small; tooth partially erupted; regardless of size of flap.	Simply alleviation
2—Space not ample to accommodate tooth; post-eruptive time small or great; tooth partially or fully erupted; regardless of size of flap.	Alleviation followed by extraction
3—Space ample to accommodate tooth; post-eruptive time great; tooth partially erupted; regardless of size of flap.	Alleviation followed by resection of flap. If there is a recurrence of infection, alleviate and extract.

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A Quantitative Technique for Determining the Reduction of Bacteria in Infected Root Canals During Routine Therapy

Sponsors: DR. BUCHBINDER
DR. ROSEBURY

by: VICTOR MARCUS
JOHN NOONAN

According to the technique devised a method has been presented for determining quantitatively the reduction in bacterial numbers in infected root canals as routine root canal therapy is instituted.

The method consist essentially in removing, under sterile conditions, periapical fluid from the opened canals of infected teeth by means of standard cotton points, of similar diameter, inserted in the canal. The length of infecting medium on the saturated cotton tips is accurately measured by millimeter gauge and the points are in turn transferred to Wasserman tubes containing definite amounts of sterile physiological saline solution. 3 cultures of an opened canal were taken at a single visit of the patient. A definite quantity of this newly infected saline solution was in turn transferred to tubes of melted agar at 40° C. containing brain heart infusion, Andrade indicator and enough agar to hold the bacterial colonies discreet during incubation.

Upon incubation the colonies were counted and the number recorded. Broth cultures were also made by students of the cases studied as checks on current infection.

Cultures were made at each visit of the patient until the case became bacterially negative. By this means we were able to check numerically the decline in bacterial numbers as therapy progressed. A complete study was made of approximately 10 cases; enough to demonstrate the efficacy of the method devised. Charts and graphs were made of our recorded observations.

Some of the conclusions arrived at are:

1. A fairly accurate clinical method of quantitatively culturing bacteria during routine root canal therapy treatments has been devised.

2. Broth and agar mediums appear to be equally effective as indicators of the presence of current infection in root canal cases. Agar having, however, the added quality of indicating quantitatively the amount of that current infection.

3. The numerical bacterial decline in various cases is not always indicated graphically by a gradual curve but shows a fluctuation, in instances, in bacterial numbers before negativity is obtained.

4. We are presently studying the efficacy of physiological saline solution compared to the routine medicaments used in root canal therapy.

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Cleft Palate Prosthesis

Sponsor: DR. OLLINGER

by SAM SCHECK

Nearly all cases of cleft palates are of congenital origin and usually have an associated harelip. The latter may, however, occur alone and may be repaired by surgical means at an early age. Operations to close the palate should be done at as early an age as possible and should be attempted even if only a little benefit can be obtained since this is the method of choice. However, there are many cases where the obturator is the best and sometimes the only method of aiding the patient. Dr. Ollinger's method is a simple and practical one. The gap in the hard palate is bridged over by a denture attached to sound natural teeth. From the rear of this denture is attached a velum, or flap which moves on a hinge. This moves up when the palatal and pharyngeal muscles contract and closes up the gap between the deficient soft palate and the posterior wall of the pharynx. When not in use, it drops down by gravity, permitting free passage of air.

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The Effect of Nearsphenamine in the Treatment of Vincent's Infection

Sponsors: DR. ROSEBURY
DR. BEUBE

by LESTER SAROFF

A review of the literature indicates that for the treatment of Vincent's infection both intravenous and topical administration of the arsphenamines have been employed. Topical ad-

ministration has been used empirically, while therapy by injection is of doubtful value, since Vincent's infection has been found to develop in patients receiving treatment for syphilis.

Dr. Rosebury conducted well controlled experiments as to the value of nearsphenamine in the treatment of Vincent's infection. Experimental Vincent's infection was produced in guinea pigs, (fusospirochetal abscess in the groin of the guinea pigs). In general the infected guinea pigs were divided into three groups; one group received nearsphenamine injected directly into the lesion, another group received the drug intravenously and the third group received no treatment. In groups 2 and 3 death from diffuse gangrene was very prevalent. The group that received the drug directly into the lesion showed an exudate that differed in appearance grossly, and microscopically showed a reduced spirochetal and bacterial count; as few as one per ten fields. The results indicate that nearsphenamine has a beneficial effect on experimental Vincent's infection by direct application, although intravenous administration was ineffective in the dosages employed.

Rosenthal maintains that the arsphenamines are bactericidal and spirocheticidal and some come nearer to fulfillment of the requirements of the ideal drug than any other used in treating Vincent's infection. Clinically its application gives immediate relief from pain as well as prompt resolution of the infection.

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A Study of Carbohydrates in Relation to Dental Caries

Sponsor: DR. T. ROSEBURY

by: N. LEFKOWITZ
B. SCHOENEMAN

This study was undertaken to determine whether the presence of dental caries in a group of children is associated with their individual preferences for particular carbohydrates.

This investigation was made at a boys' camp during the summer of 1938. Eighty boys, ranging in age from six to sixteen, were available. Each child was charted for fillings and caries. A caries index based on the number of surfaces involved was derived. These indices ranged from zero to twenty-eight. The non-carious group (for purpose of study) included only those children with a zero index, while the carious group included those from ten to twenty-eight. All other cases were excluded. This elimination left for study 17 caries cases and 10 non-caries cases.

No effort was made to influence the diet of the subjects.

The food categories involved were: (a) sugar; (b) candy—A food chart was compiled daily for each child. non-chewy and chewy; (c) gum; (d) puddings; (e) ice cream; (f) bread and rolls; (g) cake; (h) cookies; (i) pies; (j) crackers; (k) cereals—raw and cooked.

The comparative amounts of food were valued and graded according to the age and size of the child. Charts for the case types were combined so as to derive a measure of the average consumption of each food type for each of the groups. The results were corrected for statistical significance.

Due to the short space of time for observations, the small number of cases, etc., the study has very definite limitations and therefore the negative findings should not be given too much weight.

CONCLUSIONS

1. When measures of the intake of various carbohydrate foods were compared on an equivalent basis, no significant differences were found.

2. On a broad basis the gross intake of carbohydrate foods is highest among the caries groups.

3. Although the gross intake of carbohydrate foods was highest in the caries group, there is no one food or combination of foods which might have a causal relationship to dental caries.

Correlation of Dental and Medical Needs

Sponsor: DR. ZISKIN

by: CHARLES E. LOVEMAN
JOSEPH A. CUTTITA
JAMES G. CUNNINGHAM

The purpose of this thesis was to correlate the findings of the dental diagnosis charts. To accomplish this, 1,289 clinic charts of the J and K series were selected. The information obtained was divided into seven groups from which seven tables were made. The charts themselves were divided into three age groups, namely 1 to 21 years, 21 to 45 years, 45 years and over; also further subdivided into black and white, male and female, single, married, and widowed. The tables contained the following data:

Table 1. In this table the present oral complaint was handled. Twelve complaints were determined, such as toothache, gum trouble, pain in the face, etc., and the number of patients presenting with each complaint was found.

Table 2. As in the above table, the number of patients possessing the medical complaint as asked on the first page of our chart, was tabulated. From this was obtained the most important facts of the project, namely that 24.3% of the patients were in need of medical care while 20.8% were under the care of a physician at the time of the dental examination.

Table 3. Here the dental complaints were treated as were the medical complaints in the above table.

Table 4. This table was divided into five time intervals ranging from within one year to never and the answers to the question "When did you last visit the dentists" recorded.

Table 5. This dealt solely with the Bodecker Caries Index and an average caries index was determined for each patient group. These were further averaged and a final figure determined as follows:

Caries—10.74

Fillings—9.80

Missing—25.13

Total—47.29

Table 6. In this the various departments of the dental school to which the patients were referred was considered.

Table 7. The last table had to do with the pathological findings of those patients teeth marked for extraction.

In all cases except Table 5, percentages were taken of every figure and all possible comparisons of the patient groups were made. Very interesting and illuminating conclusions were drawn from the comparisons.

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A Study of the Sensitive Cervices of Teeth

Sponsor: DR. HARTMAN

by M. PEISER

To test the efficacy of a method of treatment, devised by Dr. Leroy Hartman, for desensitizing sensitive areas at the cervices of teeth, we attempted to determine a possible causal relationship for these so-called "Sensitive Necks."

On the basis of our finding the occurrence of sensitive necks were classified under three main headings or types:

Type I—due to surface irritation. There is gum recession but no caries and the etiology is quite well known.

Type II—due to a pulp disturbance with thermal changes as the dominating symptom.

Type III—is the Idiopathic type. Abrasion, erosion and caries, and are absent and recession, if any, is very slight. There is no apparent reason for the sensitivity.

The sensitive necks of teeth are presumed to be due to the exposure of the Granular Layer of Tomes found on the root surface of the dentine and normally covered at the cervix by a thin layer of cementum, in turn protected by the gingivae. Recession of the gum and other factors, expose the cementum which is soon worn away by erosion, abrasion, overenthusiastic curettage, or incorrect tooth brushing and thus the hyper-sensitive granular layer of Tomes is exposed.

The Relation of Facial Landmarks to Tooth Form

Sponsor: DR. YOUNG

by: I. BONIME
I. SIEGEL

This study was undertaken to determine whether a constant anatomical measurement could be located on the face which would serve as a guide in the selection of artificial denture teeth.

The research consisted of the measurement of various landmarks on the face such as width of the face, width of the nose, width of the eyes, interpupillary distance, and the mathematical relationship of these measurements to the width of the upper anterior teeth. The widths of the upper anteriors were measured individually at their greatest mesiodistal contour and in combinations such as the distance from the incisal tops of the cuspids, distance from distal surfaces of the cuspids and combined widths of the individual teeth.

A total of forty cases was studied. The ages of the patients were between 17 and 35.

Along with the measurements noted above, were also included a measurement to determine the average difference between the rest and working bites and the relation of the type of arch form to the degree of overbite and overjet. After the figures had been tabulated certain proportions were found to exist between the width of the upper anterior teeth and the width of the face. (Other anatomical landmarks showed no definite correlation and had to be dismissed as valueless.) On the basis of the figures obtained, we believe it impossible for the operator to select a tooth width merely on an arithmetical basis. However, if the operator uses proportions to select his tooth width, he will at least have a starting point from which he may vary his selection as the esthetics of the case warrants. It must also be stated, that although there exists a definite relation between the width of a given face and the width of the artificial upper anteriors which will appear best in that face, there are other factors which must be considered. In many cases the mouth is not well proportioned to the face and it may be necessary to select a wider or narrower tooth than harmony with face form indicates, because in such cases the teeth must harmonize at least in some degree with the mouth as well as with the face in order that they may not appear noticeably wide or narrow.

In short, the selection of the teeth is dependent upon the operator's best judgment based on experience, the functional requirement of the individual case and a good esthetic sense.

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Incidence of Caries in Orthodontic Patients at Columbia Clinic

Sponsors: DR. WAUGH
DR. JACKSON
DR. BODECKER

by GEORGE E. DICKINSON, Jr.

The number of cases is not sufficient to prove conclusively, but it does show a tendency towards less caries in orthodontic patients under treatment.

The average age of the patients studied was in a susceptible period and the average duration of treatment is long enough to determine beginning caries; however, few cavities were present.

In 34%, or in seventeen patients out of fifty, there were no new caries in the years treated. 10% had no caries before or after treatment. 24% of the patients with caries before treatment showed no signs of new caries after treatment. In 66% of the cases in which there were signs of caries, the average number of surfaces involved was a little over one or 1.35 per year.

We may deduce that orthodontic treatment has had no harmful effect on the caries index of the patients. This is manifested in the fact that these teeth are brushed and cleaned thoroughly at each treatment or about twice a month. The semi-monthly or monthly visits and advice for prophylactic odontology reduce the extent of decay, thus involving fewer surfaces.

The Effect of Age, Cements, and Varnishes on the Conduction of Heat to the Pulp Chamber

Sponsor: DR. HARTMAN

by: MATTHEW WARTEL
MILTON WECHSLER

The use of cements and varnishes to prevent thermal shock to the pulp has been an accepted procedure in the dental profession. The use of these has apparently been based on clinical experience alone. We set out to find a scientific basis for this procedure.

Since, to our knowledge, no previous work has been done on this problem, we had to devise apparatus suitable for discovering:

1. The relation of the age of the patient to the conduction of heat through the dentine to the pulp chamber;
2. The effect of cements replacing dentine, on the conduction of heat to the pulp chamber; and
3. The effect of varnishes, used to coat the dentine, on the conduction of heat to the pulp chamber.

The apparatus was so arranged that a heating element could be brought in contact with the occlusal dentine, and the heat produced in the pulp chamber, directly beneath it, could be measured by means of a thermocouple. Final results were calculated in temperature change per millimeter of dentine or cement.

Unfortunately, so much time was spent in building the apparatus that not enough was left to work with many teeth. Consequently, there is insufficient data from which to draw any definite conclusions. However, our observations do indicate that cement (red copper and light yellow were the only ones worked with) is a better conductor of heat than dentine. Hence it seems that dentine is irreplaceable for the prevention of thermal shock to the pulp. This does not, however, take into account the irritability of dentine.

The First Permanent Molar: Its Genesis, Prognosis and Pathology

Sponsor: DR. E. B. HOYT

by ROBERT I. MASON

It was found from case study that this tooth was lost for the following reasons:

1. Neglect—mistaken for a deciduous tooth since it had no predecessor.
2. Ignorance—other than above.
3. Malnutrition.
4. Economic reversalment.

The whole dental mechanism, through the various normal biologic and mechanical processes, inclines to be in a constant state of flux. The component elements, the teeth, are each retained in their "normal" positions through proximal contact, antagonistic acclusal relationships and cuspal interdigitation. If this be the case, then each individual tooth may be considered as a keystone to both dental arches, since with the loss of any one tooth active forces begin to operate. Such forces are the tongue, the cheeks, and the wedging of food.

Three primary conditions are automatically created when a tooth is lost and in these the succeeding changes in the dental arch have their inception. These conditions are:

1. Loss of continuity of the dental arches.
2. Loss of normal occlusion.
3. Reduction or complete cessation of local function.

The succeeding changes usually follow an almost classic syndrome. There is a mesial tilting and drift of the second molar, followed by its distal neighbor, distal drift of the bicuspid adjacent to the edentulous area with torsion and a related fanning out of the teeth anterior, even affecting the opposite side of the same jaw, and extrusion of the opposing molar. Tem-

poromandibular joint affectations, tongue trauma, occlusal trauma, abnormal stresses, periodontal disorders and caries may result in varying degrees. These findings, in the main, are apparently constant, but do vary with systemic health, rate of growth, masticating habits, arch form, pre-existent malocclusion, sex and race. Certain torsional changes as observed in the second bicuspid are unexplained and await further observation.

Immediate Denture Service

Sponsor: Dr. CRAWFORD

by: HARVEY HAMBERG
ISRAEL N. GREENBERG

Immediate dentures are completed dentures, either partial or full, that are made before the patient's teeth are extracted and inserted in the mouth immediately after the teeth are removed, i.e., at the same sitting.

We shall limit this paper to the technique of full immediate dentures. Impressions are taken for study models. In addition, an impression is taken of the anterior teeth in centric occlusion. All the teeth posterior to the cuspids are extracted in both jaws, and after a period of approximately three weeks, depending on the state of healing, impressions are taken. Dentacol or a combination of compound and dentacol may be used as impression materials. Casts are made, the bite is taken, (anterior teeth serve as guides) and the casts are mounted in the articulator. The shade and mould of teeth are selected.

The anterior teeth of the cast are cut away one by one, and replaced by the porcelain substitute in the exact position and relationship as the normal tooth. Unesthetic conditions are not copied exactly, but modified so as to avoid too great a change and at the same time produce an esthetic effect.

The set up is completed and the case is vulcanized. The anterior teeth are now extracted and the dentures are inserted immediately. It is necessary to rebase the denture at a later period to overcome the effects of shrinkage of tissue or resorption of bone.

The advantages claimed of immediate dentures are numerous, and the most important may be listed as follows:

- (1) Physical and mental suffering due to a long edentulous period is eliminated. It is of decided psychological advantage in introducing patients to full dentures.
- (2) Facial contours are maintained.
- (3) The patient is never completely edentulous, and can continue business and social relations.
- (4) Alveoli are protected from food debris. Hemorrhage is reduced and post operative pain and healing is quickened.
- (5) Temporo-mandibular joint is not disturbed and the patient does not suffer muscle fatigue, impaired hearing and similar ills.
- (6) Alveolar process is conserved.
- (7) True functional centric relationship can be more easily established.

Sterilization of Instruments

Sponsor: DR. GILLET

by LESTER FINKEL

Problem:

To test the sterilizing value of hot air and of hot air plus alcohol vapor on dental instruments when placed in a sealed tube immersed in boiling water.

The device tested was a brass tube made to fit the compartments of our clinic sterilizer provided with a screw cap for closing the open end.

B. subtilis, a very resistant spore-bearing organism was employed as the contaminant. The objects to be sterilized were

small glass pellets and the culture media was beef-heart broth. As a control I used the method of sterilization that we employ in the infirmary, i.e., boiling.

In addition a series of cold sterilization (70% alcohol) tests were run using *B. subtilis*.

Minutes	Boiling water	Closed tube in hot air	Closed tube plus 5 c.c. alcohol
5	no growth	growth	no growth
10	no growth	growth	no growth
15	no growth	growth	no growth

Cold sterilization showed growth even after one hour.

The important point to bear in mind is that moisture has a great positive influence in sterilization, as illustrated by the table. We may conclude that there is no practical advantage in the use of a sealed tube plus alcohol over boiling water for sterilization.

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Diseases of the Salivary Glands

Sponsor: DR. L. R. CAHN

by C. DUNN
A. KAMEROS

In this study of the diseases of the salivary glands, we reviewed every known pathological lesion in which the parotid, sub-maxillary, sub-lingual and accessory salivary glands were involved. Our material came almost entirely from the articles published in both the medical and dental periodicals; and we attempted to review all the diseases from the viewpoint of the research men in this field.

Amongst the common ailments reviewed was mumps, the specific inflammation of the salivary glands. Also discussed were the non-specific infections which occurred in the acute, sub-acute or recurrent and chronic forms. Of special interest in these non-specific infections is post-operative parotitis which may result secondarily to an operation on the viscera of the digestive system.

Another important subject in our study was that of tumors of the salivary glands. This included not only the mixed tumor which occurs most frequently of the tumors connected with these glands but also the various other types that may be found arising in the saliva-producing organs.

Another important entity which the dentist may often meet was salivary calculi. This was gone over quite thoroughly. Another interesting involvement occurring chiefly in women past middle age is xerostomia.

Other diseases to which the salivary glands are susceptible but which are met less frequently are obstruction and fistulae, pytalism, syphilis, tuberculosis, actinomycosis, and ranula which although not strictly a disease of the salivary glands is associated with them by some investigators.

Other rare findings were Mikulicz's disease and Mikulicz's syndrome, macrocheilia and acute necrotic parotitis.

In all these diseases our plan of study was in this order,—occurrence, etiology, histopathology, morbid anatomy, symptomatology, diagnosis, treatment and prognosis.

In conclusion, we can truthfully say that this study has helped us invaluablely in the problems of literary research and has taught us an important phase of oral pathology.

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Studies on the Effects of Chronic Radium Poisoning on the Dentition of White Rats

Sponsors: DR. CAHN

by JOEL FRIEDMAN

DR. BLACKBERG

The purpose of this experiment was to determine the effect of variation in the calcium-phosphorous ratio in the diet on the dentition of animals which were receiving injections of radium. The two diets used were (1) a normal diet with adequate

calcium and phosphorous; (2) a low-calcium diet. Both of these groups were subdivided into two groups of five rats each, one of which was used as a control and the other receiving the radium injections.

Chronic radium poisoning was found to produce the following effects on the dentition of rats:

1. Secondary dentin deposition in incisors and molars, with death of pulps.
2. Hypercementosis and following death of pulps, resorption of cementum and ankylosis.
3. Bony sclerosis and thickening of the trabeculae.
4. Gingival destruction and loosening of the teeth by vertical periodontoclasia.
5. Mild changes in the marrow tissue, of various types, hyperplastic and aplastic.

A diet low in calcium did not markedly alter the effects of chronic radium poisoning on the dentition of the rats.

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The Influence of Dietary Calcium, Phosphorous, and Vitamin D on the Deposition of Lead in the Teeth

Sponsor: DR. M. KARSHAN

by: HARRY QUAIN
ISIDORE M. SAMUELS

It has been known that ingestion of lead results in increased lead deposition in the bones and teeth. The skeletal system acts as a storehouse for the ingested lead. The addition of vitamin D to lead containing diets causes a much greater concentration of lead in the tibiae of white rats than in a similar group not receiving the vitamin. Changes in dietary Ca : P ratios also affects the amount of lead deposited in the bones. Separate groups of rats were kept on:

- a) a low phosphorous, low calcium diet
- b) a high calcium, low phosphorous diet
- c) a low calcium, high phosphorous diet

—all diets containing lead. Half of the animals in each group received in addition, vitamin D. The vitamin D animals in all groups showed a greater concentration of lead in the bones. The lowest of bone lead was found in the low calcium, high phosphorous, and in the low phosphorous, high calcium groups. In later experiments, the lowest concentration of lead in the bones was found in the low calcium, high phosphorous groups where incidentally the concentration of lead in the blood is also lowest.

It was planned to determine whether the teeth would respond to lead diets, with and without vitamin D, and with high and low calcium and phosphorous ratios, as do the bones.

The incisor teeth of white rats on such lead diets were removed in toto and carefully defatted. After obtaining the dry, defatted weight of each incisor, the tooth was ashed and the ashed weight obtained. The incisor ash was then analyzed for lead.

It was found that:

1. Lead in the diet results in an increased lead concentration in the ash of the incisor teeth of young rats.
2. Vitamin D further increases the deposition of lead in the teeth of young rats on diets containing lead.
3. A high phosphorous, low calcium diet is most unfavorable for deposition of lead in the teeth.
4. Changes in the lead content of the teeth parallel those found in the bone, but the increase in bone is much greater than in the teeth.
5. The addition of lead to the diet does not influence the ash content of the incisors of rats on diets with abnormal Ca : P ratios, in the presence or absence of vitamin D.

Influence of the Thyroid Gland on Tooth and Jaw Development in the Rat

Sponsor: DR. ZISKIN

by HANS KERBER

The problem was an attempt to determine experimentally what influence the thyroid gland exercises on tooth and jaw development in the rat.

Basically the experimental procedure consisted of:

1. Ablation on newborn rats of both thyroid and parathyroid glands and subsequent replacement therapy to study changes produced by this procedure. In some instances conditions comparable to human cretinism were produced.
2. Injection of thyrotropic hormone into normal rats. This gave essentially a hyperthyroid condition.
3. (a) Eight rats were thyroparathyroidectomized. Of these eight, two received parat hormone therapy alone, two received thyroid hormone therapy alone, two received both parathormone and thyroid hormone therapy, two received thyrotropic hormone therapy.
(b) Eight rats were normal. Of these eight four received thyrotropic hormone therapy, four were used as controls.

Data collected consisted of:

- A. Before autopsy: measurements of body weight and length, observations on behavior and appearance of the animals, observations on the beginning of eruption of the central incisor.
- B. After autopsy: weighing and radiographing of dissected lower jaws, measurements on upper jaws and teeth, histological examination of tracheal region to determine the success of the thyro parathyroidectomy, histologic examination of lower jaws and teeth. (All histologic work is incomplete to date.)

Findings:

A. On thyro parathyroidectomized rats—

1. Thyro-parathyroidectomy of newborn rats results in a severe retardation of growth and jaw development.
2. Parathormone therapy alone is ineffectual in promoting growth and jaw development in thyroparathyroidectomized rats.
3. Thyroid hormone therapy is effectual in promoting growth and jaw development in thyro parathyroidectomized rats.
4. Thyroid hormone and parathormone therapy combined produced an increase in growth and jaw development, in thyro parathyroidectomized rats, greater than with either hormone therapy alone.

B. Thyrotropic hormone therapy in normal rats—

1. Thyrotropic hormone therapy produced an increase to above the normal in growth and jaw development of the male rats.
2. Thyrotropic hormone therapy failed to produce growth and jaw development equivalent to that of normal in the female rats.

Painful Tongue

Sponsor: DR. CAHN

by I. AXELROD

This is a treatise based upon previous literature. An attempt is made to gather into one article all the diseases which may cause painful tongue. As far as could be learned from an

extensive review of the literature on the tongue, this has never been done before. Recourse was had to some forty pieces literature and a number of textbooks on medicine and dantistry.

The author found some twenty diseases which may cause painful tongue. The five chief offenders were found to be carcinoma, tuberculosis, ulcerative glossitis, pernicious anaemia, and geographic tongue. Some of the others discussed are sprue, glanders, herpes zoster, acute abscess of tongue, and lymphangioma. These are comparatively rarely observed.

Treatments for each disease are given as well as a discussion of the prognosis of each disease.

Technique for Bacterial Staining of Decalcified Rat Teeth

Sponsor: Dr. ROSEBURY

by: M. H. SCHEIER
L. SKOLNICK

The sections used for staining in this technique, were those of rat mandibles. These rats were raised on a caries producing diet by Dr. T. Rosebury. Histological sections made by Dr. Rosebury stained with Hemotoxylin-Eosin showed amorphous deposits within the carious dentine. Dr. Rosebury believed these deposits to be masses of bacteria.

Our problem was to stain the sections bacteriologically, so as to show up the presence of bacteria within these deposits. Previously Dr. Robinson had made attempts to stain these but had been unsuccessful in getting a standard staining technique. Krontfeld and others had stained human caries for bacteria but this has never been done on rat teeth.

After trying several staining techniques, our most successful results were finally obtained with one method which was easily reproducible by anyone. This consists of a modified Willman stain which in itself is a modification of the Gram stain. In modifying the Willman stain a colormetric guide was used which helped to keep the concentration of the Gentian violet constant.

Our sections showed various types of fissure caries, with different depths of dentine invasion. The amorphous deposits of the histological sections were found to be filled with bacteria. The bacteria were found within the dentinal tubules and caused a distention of the tubules. The bacteria also digested some of the dentinal tubules. The majority of the bacteria were found to be cocci although in some cases bacilli were found.

A Study of Micro-Organisms in Experimentally Produced Caries in the Rat

Sponsor: DR. ROSEBURY

by: SIMEON BLINN
ABRAM GRANETZ

The writings of numerous men on the problem of dental caries advance the idea that lactobacilli are the micro-organisms of prime etiologic importance in dental caries. Criticism has been advanced that the methods employed by investigators whose findings are interpreted as indicating the specificity of lactobacilli favored the growth of these organisms and inhibited the growth of streptococci, whose role in the process of dental caries has been emphasized by numerous other investigators. It is our

object to study the micro-organisms in lesions of experimental dental caries in rats using a method which would permit growth of either lactobacilli or streptococci in these lesions.

A litter of Long-Evans strain of hooded rats was placed on a caries producing diet consisting of coarsely ground (10 mesh) corn 89%, sucrose 10%, and calcium lactate 1%. There were no caries in the fissures of this group.

TABLE

	Media favorable to growth of Streptococci		Media favorable to growth of lactobacilli	
	No. fissures studied	positive findings	No. fissures studied	positive findings
Fissures found to be carious—12	4	2	8	8
Fissures found not to be carious—48	26	5	22	21

Noteworthy findings were:

1. Presence of lactobacilli in fissures of molar teeth of animals on caries producing diet irrespective of the presence or absence of caries in that particular fissure.
2. Relatively low incidence of organisms other than lactobacilli in the fissures of molar teeth of these animals using a method which would permit their demonstration if present.

Due to the small inoculum, negative results were not decisive.

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Delinquency in Relation to Dental Defects

Sponsor: DR. BODECKER by EDWARD H. R. McCROSSEN

It would be interesting to see whether any relation exists between the various dental defects and delinquency. Most of the supporting evidence for this proposition has been based on pure conjecture or upon insufficient observation.

We found from clinical examination together with the study of full mouth x-rays, the following caries indices in delinquent children entering the New York State Warwick School for boys. Caries indices by surfaces of delinquent males.

Persons	Age	Aver. Index
162	11-14	19.96
422	15-19	26.03

Caries indices by surfaces of average male taken from Prof. Charles F. Bodecker's material to be published shortly.

Persons	Age	Aver. Index
294	5-9	6.49
324	10-14	11.76
470	15-19	19.60
312	20-24	23.45

Caries indices by surfaces of normal females.

Persons	Age	Aver. Index
317	5-9	4.67
310	10-14	13.05
435	15-19	20.06
284	20-24	26.35

We see therefore, from these limited cases that the caries indices are higher in the delinquent children than in the average children.

Reaction of Bones and Soft Tissue to Foreign Bodies

Sponsor: Dr. FRANK BEUBE

by: LOUIS KUNIN

MILTON ROTHSTEIN

For centuries, foreign bodies in the nature of nails, screws and plates, etc., have been used as an aid in fixation of fractures where external splinting was valueless, and in orthopedic surgery. There has been some degree of success, but also many failures—failures that have been due to erosion of bone about these physical devices.

Upon reviewing the literature for the past twenty odd years, we find that practically all the medical work done in relation to this subject has been empirical. Recently, (Venable & Stuck) from their work on dogs and rabbits, have concluded that the stainless alloys similar to those used in dentistry, were completely inert in the body, compatible with living tissue and resistant to the body fluids.

Leriche and Policard have declared that since bone transplants when they do not unite, become in themselves foreign bodies, it might be wise to attempt to discover an ideal material for surgical prosthesis.

In our work, we used five dental materials, gold, silver, Ticonium, Amalgam and porcelain. A dog was selected as the experimental animal. The dog was anaesthetized and at the first operation, a semicircular incision was made over the posterior region of the lower right mandible and the mucous membrane was laid back along with periosteum. With bone chisel and mallet; five shallow trenches were prepared horizontally and separated from each other by approximately 2 to 3 mm. The five materials were inserted into their respective trenches and the mucous membrane laid back so that both bone and soft tissue came in contact with the material.

A similar operation was done on the left side of mandible. In the first operation, we had exfoliation of the porcelain, a few days afterward. But we cannot deduce that this was a tissue reaction since the dog rubbing its face with its paw may have torn the wound with the resulting exfoliation. Hence no conclusion can be drawn at the time of writing this preliminary report, since one histological sections were not as yet prepared for study.

• • •

To Determine the Center of Rotation of the Mandible

Sponsor: DR. CRAWFORD

by ELIAS KOGAN

This experiment makes use of the gothic arch tracings as determined by the House technique for making full upper and lower dentures.

The gothic arch tracings were made by clinic patients as part of our regular denture procedure. Then they were photographed natural size and enlarged. The photographs were mounted on paper on which all measurements were drawn. Only the lateral tracings were used.

This experiment is based on the theory that arcs drawn from a fixed point from which perpendiculars are drawn will again meet at this fixed point. Therefore, perpendiculars were drawn to the lateral tracings of the gothic arches to see if they would meet at a common point which is the center of rotation of the mandible.

The results of the experiment show that there is no point center of rotation of the mandible, but that there is rather an area of rotation.

Ante and Post Partum Observations in Pregnancy Gingivitis

Sponsor: Dr. ZISKIN

by ROBERT F. McGANNON

Summary—

1. The post-partum appearance of the gingivae are considered in relation to pregnancy gingivitis.
2. Twelve cases were studied.
3. Literature relating to the study is cited.
4. Findings are discussed in detail.

Conclusions—

1. The post partum examination in nine of the twelve patients showed a notable decrease in the inflammation of the gingivae present during the period of pregnancy within ten days after delivery.
2. The improvement in the gingival condition that was noted was more marked in those cases where the gingivitis was severe and the oral hygiene poor.
3. The changes that were noticed took place five to eight days after parturition. Before that time the improvement was imperceptible.

A Further Roentgenographic Study of the Temporo-Mandibular Joint: Its Correlation with Certain Auditory Disturbances

by MARTIN L. SCHER

The unprecedented interest that has been aroused recently in the study of the temporo-mandibular joint has led to an earnest, but rather confusing attempt to assign it to its proper position in regard to a great and varied number of rather vaguely explained symptoms.

Maves has outlined a plan that seems in part to put the question on a more definite and sounder basis. We must regard,

1. The standardization of the normal
2. The etiology of abnormalities
3. The symptoms of abnormalities
4. The classification of joint symptoms
5. The procedure for the diagnosis of abnormalities
6. The treatment of abnormalities
7. Complete knowledge of the anatomic and roentgenologic structure of the joint.

The ear symptoms depend upon actual involvement of the Eustachian tube and tympanic structures. These symptoms as observed were: impaired hearing continuously or with intervals of improvement; stopping or "stuffy sensation in the ears, marked about mealtime; tinnitus, usually low buzz in type; less often a snapping noise while chewing; pain of the dull type within or about the ear; dizziness, mild or again, attacks of prostrating severity, definitely relieved by inflation of the Eustachian tube.

The anatomic explanation of pain may be explained by the fact that there has been erosion of the bone of the glenoid cavity bearing only a thin plate between the condyles and the dura. Each closure of the jaw is a pain producing impact. The hearing disturbances are due to muscle pressure (upper head of the external pterygoid) in marked overbite cases and the piling of soft tissue against the Eustachian tube.

The basic fundamentals of X-ray study of the joint are

1. A definite standardized technique for the roentgenography of the temporo-mandibular joint.
2. Registration of the normal vertical dimension between the upper and lower jaws by the patient at a point opposite the first molar region.

In this study we used a modification of the Bullitt technique for mastoid radiographs.

The outstanding results obtained were:

1. **Most** of the cases in the open protrusive position, the condyle went over the crest of the articular eminence.
2. The condyle itself does not show the smoothing contoured elliptical surface as described by anatomists (in some cases).
3. There is little change in the position of the condyle in both centric position and in an open retrusive position.

The Preparation and Filling of a Class III Cavity With Gold Foil

(A Motion Picture)

Sponsors: Dr. OMAN

Dr. CRAWFORD

by NORMAN FEITELSON

LEO R. SCHWARTZ

The use of motion pictures in education is growing rapidly, and dentistry is a field well suited for this use of motion pictures. The field of a dental operation is usually so small, and avenues of vision into the field are so narrow, that very few persons besides the operator can see any dental operation entirely or well. The motion picture can give to a great number of students the advantage of watching an operation from the best point of view and for its entire duration, as well as opportunity for repeated study.

It was with these thoughts in mind that Dr. Oman suggested the making of such a picture as we made. Dr. Oman performed all the operations—in the patient's mouth, and on a mounted extracted tooth. The operations on the patient were photographed during the Christmas recess of 1937-38. The operations on the mounted tooth were performed a few weeks later, and the titles were photographed and inserted and the film completed by March, 1938.

All the Equipment used was generously lent by Dr. Crawford, and consisted of a Cine-Kodak Special Camera with 1-, 3-, and 6-inch lenses, extension tubes, tripod, exposure meter, and lights.

The picture consists of four parts:

1. Application of rubber dam
2. Preparation of the cavity
3. Filling the cavity
4. Finishing the filling.

All four parts were photographed as performed on the patient. Parts 2 and 3 were also photographed as performed on a mounted extracted tooth. This facilitated thorough demonstration of the entire operation as those parts of the cavity which were invisible in the patient's tooth were made visible on the mounted tooth.

The finished picture left something to be desired. There was an error in exposure which persisted throughout the entire film, and which limits its use to a short projection distance and a highly efficient screen. However, it constitutes a more or less valuable addition to the school's film library.

The Maintenance of Cerebral Equilibrium Under the Stress and Strain of Infirmary Practice

The purpose of this paper is to analyze a few of the more common clinical situations that arise in infirmary practice and to outline the possible methods of solution. We present this in the hope of helping to make a more happy patient-student relationship.

• • •

Clinical Situation No. 1

You have carefully prepared, plugged and polished a Class III gold foil. The instructor, after having first scrutinized the finished product by means of his 200 inch doubly-refractive parafocal examination lens, gently sinks your Black's knife into the incisal margin, and cautiously gaining a fulcrum on the patient's umbilicus, nimbly dislodges the foil.

You may meet the situation by doing the following:

- a. You start all over again and say to the patient, "I just have to plug a few more ropes."
- b. You smile sweetly to the instructor and say, "Let me show you my fast plugger technique."
- c. You just look amazed.
- d. You go down to the lunch room and get drunk on a bottle of pepsi-cola.
- e. You just laugh, and laugh and scream.

• • •

Clinical Situation No. 2

You are working on a five year old child. He is most uncooperative, refusing to keep the saliva ejector in his mouth, cries on the slightest provoca-

tion, and insists upon applying a half-nelson to your neck as you bend over to put a mirror into his mouth.

You may meet the situation by saying:

- a. "Be a nice boy, open up big and let the doctor examine your mouth. The drill will only tickle."
- b. "Open your mouth, you little so and so, or I'll kick you in the teeth."
- c. You may discipline him by ramming the towel down his throat, gently applying the 190 lb. weight of your torso to his physiognomy and wait for the developments.
- d. You might gently tap with a mallet the top of the cranium until the eyes assume a glassy appearance.

• • •

Clinical Situation No. 3

You have just completed a beautiful set of dentures and the patient gives you a \$5.00 tip. You may say to the patient:

- a. "Faculty regulations do not allow us to accept tips."
- b. "You can feel free to call the clinic if you have any trouble any week day after 5 P.M. or Saturday after 1 P.M., or any other day when I'm not around."
- c. "Save your money, you'll probably need another set of dentures in a week or so."

- d. "You will have to come back three times for trouble shooting. There will be a small additional charge of \$1.00 per visit."
- e. "We are not allowed to accept monetary remuneration, but I do wear a size 15 shirt and 6½ gloves and 12 socks."

• • •

Clinical Situation No. 4

You are preparing a d. o. on an upper first molar. The instructor tells you to sharpen up the line angles. Inadvertently, you expose the pulp. You may meet the situation in the following manners:

- a. You wait a few moments until your tachycardia passes off and then smile from bicuspid to bicuspid saying, "I am sorry the tooth will have to come out. The laugh is on you."
- b. "The tooth will have to come out," and then proceed to enumerate the 16 reasons why a first molar should be replaced by means of a bridge.
- c. "I was only following instructions. If I were you I'd sue the school."

- d. You can pulp cap the tooth and then refer the patient to the literature on the success of pulp cappings.
- e. You can tell the patient that you shall be happy to do R. C. on the tooth.

• • •

Clinical Situation No. 5

You have completed a beautiful Class II inlay. It's been checked, but somehow or other no one checked the contact. You cement the inlay. You can meet the situation in any one of the following ways:

- a. You can put a toothpick in the adjacent tooth and wedge it into contact. Make sure to hide the toothpick by a small blob of compound about the size of a golf ball.
- b. You can tell the patient that the inlay will have to come out, and proceed to bang his or her head off.
- c. You can run down to Cooks travel tours and present the patient with a complimentary ticket to Ethiopia and mark your slip void.

• • •

The Instrument Kit

Morris has always seen to it that our instrument kits have been full. At times they have been full to overflowing. And whenever we were rushed and in addition carrying articulator, sterilizing basket, towels and chart, they have, with a clatter and clang, overflowed. Yet instrument-rich though we were, we have always felt that there has been a distinct lack of certain things,—things which might have well been included in our kit and which should certainly be added to future instrument lists. Things such as:

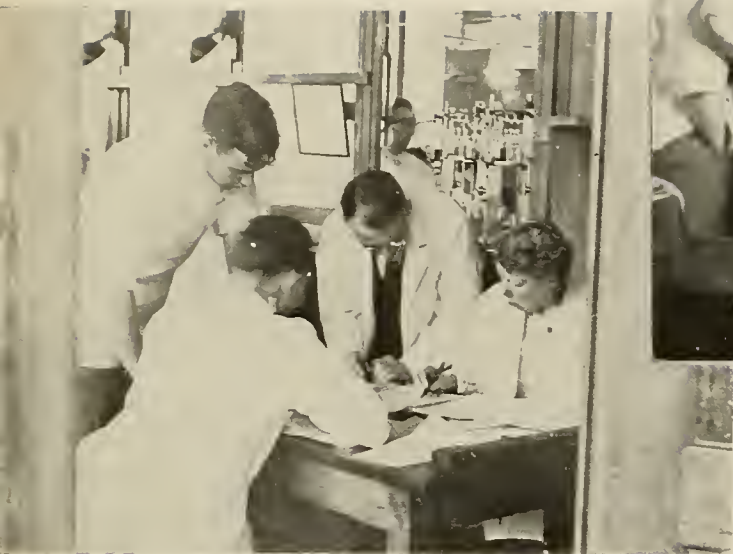
- 1. One dozen catchless explorers
- 2. Intra-oral solder and soldering outfit
- 3. Assorted cement line erasers

- 4. One Gothic Arch puncher-outer
- 5. One specially mounted frog's hair
- 6. One bottle of enamel wall polish
- 7. Assortment of x-rays showing perfect fit for crowns, inlays, and root canal fillings
- 8. Three yards of cement flooring (to be cut as needed)
- 9. A pair of alveolar ridge adjusters
- 10. An open-wideable, non-cryable, salivaless-ible child patient
- 11. An automatic inlay fitter
- 12. One sturdy onager for carrying kit.

Through the Years

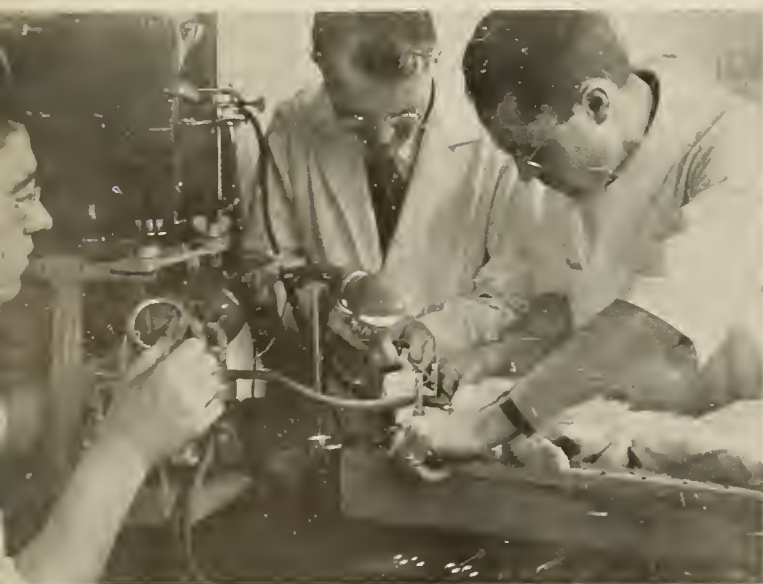


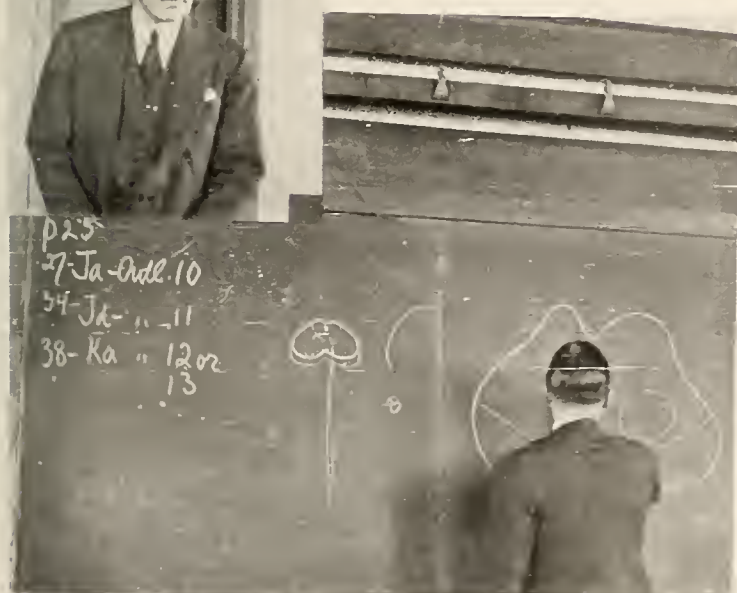
*Being a Pictorial Presentation of
Highlights of Our Student Life*

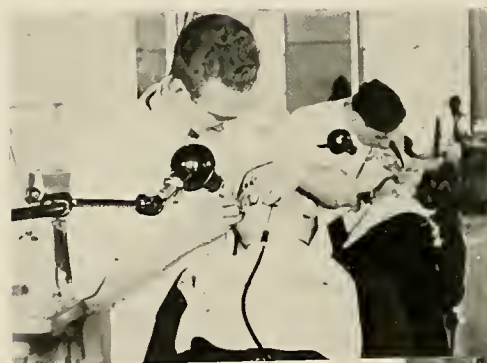


Scalpels and cats

or midnight oil burns and burns, was the theme of our frosh and soph years. We learned what it was to wade through ten ton texts, ingesting detailed descriptions and putting our knowledge to work on cadavers and animals. We had time for some plaster splashing as art bases came into vogue. They were swell years, even though, as the lower right hand picture shows, we were often in the dark.







Hail clinician

happy man! So we thought those first few days in the Infirmary. We learned better. Calling you doctor compensated for being an hour late, thought the patient. They learned better too. Acquaintance with the playful rubber dam was made via the "you practice on me, I practice on you" system. The patients though could never retaliate, fortunately. Hail clinicians!





The gothic arch

came and so did Ticonium. "Now to the right. Now to the left." Ellison will never forget . . . He did eight chew ins at different bite openings for one and the same patient. Hyman too, is seen here at his accustomed place—the lathe. Still polishing that famous case. There was also a little matter of a bridge, and aqua regia: something to do with pickling. But the House articulator didn't faze us. We gradually came to love every one of its many shining gadgets. At least it does have an automatic miller.



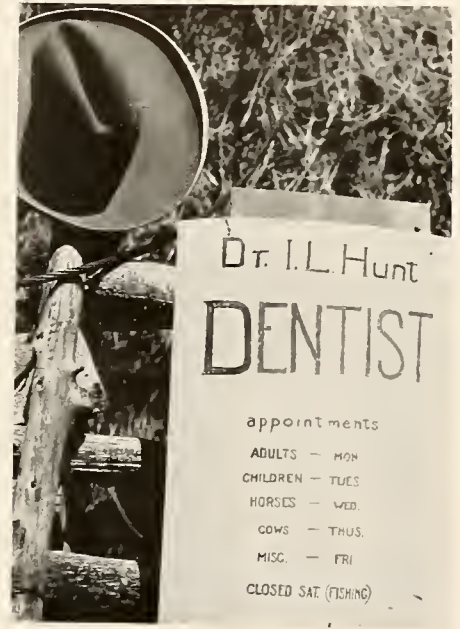






The Letchworth trip

was a high spot of the senior year. It took us a day to see the immense institution for the mentally deficient. After a little impromptu football we went to the gymnasium where Dr. Humphries, the director of medical research, presented a series of clinical cases. Towards the end, Marvin, a cretin, took it upon himself to grunt for us a love song. It took gentle persuasive powers to discourage him. Later, armed with tongue depressors we examined the patients. No, the pictures do not show any inmates. Anent Dr. Hunt's western schedule, a petition is now being circulated to have our Infirmary officially adopt it.



ORAL HYGIENE





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Secretary

ORAL HYGIENE

By Anna V. Hughes, D.M.D.
Professor of Dentistry

About a year ago the dental hygiene profession suffered a great loss due to the death of Dr. Alfred C. Fones, the man whose inspiration, foresight, faith, and humanitarian instincts were so largely responsible for the founding and successful continuance of the dental hygiene movement.

The lack of his personal presence should not, however, blind us to the double heritage which he has left to all those who are trying to proceed in the direction he so ably indicated. For over twenty years of tireless effort and unflagging interest, he guided and encouraged the work of the dental hygienist so that he was able to leave behind him a well-established profession which you can now enter with confidence. That is no mean achievement. The work he planned for you and your successors, and which you are now about to undertake, is work of which you may well be proud, for it employs your talents and abilities not only for your own selfish gain but also for the better health and appearance of those who seek your services. That this field of activity is open to you today is due in no small degree to the unswerving zeal of the man who organized the first dental hygiene school and then, throughout the rest of his life, gave active support to the further development of that profession.

The second heritage he has left you is equally important. It is the memory of himself, the man, and the life he lived. His idea, if wrongly applied or feebly supported, would have been of little account. To his vision he added steadfastness of purpose, a co-operative spirit, and good hard work. These qualities insured his success as I am

confident they will also insure yours if you will make the effort to cultivate them.

To start a school is never easy. To train and place students of a still unrecognized profession is incredibly difficult no matter how good the cause for which you work. Yet that is what Dr. Fones undertook and what he successfully carried through. From his small beginnings have grown the training schools of the present, which are well organized, well staffed, and in many instances form an integral part of our finest universities. Today, the students of these schools are graduated to occupy positions in schools, clinics, and private offices where the importance of their work is accepted without question. Many people may have joined together to make this rapid progress of the dental hygiene movement possible, but at its beginning and as a staunch support throughout its course stood Dr. Fones.

It is not given to everyone to start health or public welfare movements, but it is the right and the duty of each of you entering this profession to add to the good which it accomplishes. It is in this larger sense, by utilizing to the utmost all that is finest of your character and ability, that we are asking you to follow in the footsteps of your leader. He has pointed the way and set before you a goal that is well worth while. During the past year, we have walked with you a short distance along this path. And now, as you are graduated, we are waiting, eagerly and confidently, to see you proceed on, ever on, with firm sure steps.



PresidentSWANN E. DAVIS
 Vice-PresidentMARY WOODRUFF
 SecretaryGLADYS SMITH

YEAR BOOK COMMITTEE

SWANN DAVIS, Chairman
 HILDA PENNER
 BEATRICE OTTO
 MILDRED SCHARF

ORAL HYGIENE CLASS OF 1939

It was a bright, warm September day that a group of fifty-two ambitious women hailing from snow covered Canada to sunny Florida, met for the first time in room F-207. Excitement, anticipation and a degree of satisfaction was seen on every face. One by one we met the instructors and faculty, Dr. Hughes, Dr. Luhan, Miss Walls and Miss Hollis. Then entered Maurice with green boxes which contained numerous strange looking instruments ("I wonder if I'll ever learn to use these?"). Next followed measurements for uniforms, purchasing books, etc., etc—how impatient we were to be done with such trivial preliminaries and begin our work. By September 22nd we were doing routine schedule.

In Dr. Diamond's Lab. we painfully cut our first teeth, from wax blocks, of course. His lectures volleyed forth a book full of technical terms. It seemed impossible that one small mouth could contain so much.

Dental Hygiene, Nutrition, Child Hygiene, Bio-Chemistry, Anatomy and Physiology, Bacteriology, Radiology, Histology and several other "olcgies" filled our time to overflowing—and the home folks wondered why we didn't write more often.

November brought with it Mannikin Training. We donned our white gowns, caps, shoes and hose. With grim determination we began to polish off stains and plaques (pencil carbon) and scaled off calculus (sandarac and plaster of paris) until blisters appeared; only to put it on again and repeat the process day after day. Poor "Butch" (all of our would-be patients were named) was the best patient we will ever have for he suffered all in silence.

Thanksgiving not only meant a turkey dinner and a snow storm but conveniently arrived in time for first trimester finals—for two weeks the mid-night oil burned until the wee small hours of the morning at Parnassus and homes of future O. H's.

December brought the lovely annual tea given

by the Alumnae at the Men's Faculty House and our first real patients. On Tuesday the 13th we divided for the first time, some went to the floor H Clinic with Dr. Hughes and Dr. Luhan, to Campus with Miss Walls, to 59th Street with Miss Hollis, to Diagnosis, Oral Surgery or Radiology. Wherever we were, we contacted patients. In our hearts there was fear, anticipation and a determination to apply all the things we had been taught to the best of our ability. We hope our faces did not betray our emotions for little did Mr. or Mrs. First Patient realize that he was in the hands of a novice.

With so much to do time was literally flying and good byes for Christmas vacations were heard. Two whole weeks of fun and frolic! But all good things must end and January found us together again with many exciting stories to exchange of wonderful holidays at home.

February brought the close of the second trimester and more final exams.

The third trimester brought new courses of study and visions of pins and blue and purple bands that we would soon be wearing. Rumors of State Board Examinations were heard—we had been putting the thoughts of these dreadful things out of our mind but soon they were to be a reality.

May 24th spelled graduation—that long awaited, hard earned event. Proud parents and prouder students assembled together for the graduation exercises. What a thrill as we marched down the aisle of McMillin Hall, how the gold school pins sparkled on our white gowns and speechless were we when we received those lovely bands. Our happiness was somewhat tinged with sadness for with this goal achieved, our time together was almost over . . . parting of friends but friendships will live on eternally.

The days in the clinic after graduation sped quickly and on June 6th we said our fond farewells to teachers, friends and school.

May success be with us always.

—Swann Davis.



LILLIAN BERNSTEIN
New York, New York



FLORENCE M. BLACHER
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THE PLACE OF THE DENTAL HYGIENIST IN SOCIETY

A thousand years ago the face of society was vastly different from that with which we are familiar today. Even narrowing the span of years to the beginning of the twentieth century spectacular transformations have taken place since that time. Society is continually in the throes of incessant change that swirl it backward and forward tearing it from its moorings at one point and anchoring it more securely at another. But out of this conglomeration of social forces that operate to bring about social change we can see with historical retrospect a steady stream of scientific progress forging away at a dependable speed in spite of all obstacles. The history of medicine bears evidence of its contribution. Great scientific advancements have been made whereby some of the diseases which threatened earlier generations have become partially or wholly under control.

Another progressive step which will change the face of society is the goal toward a "Healthy Citizenry." The philosophy underlying this aim is not found solely in curative methods but emphasizes the preventive approach as the more lasting and more satisfactory way. Moreover, in the achievement of this end there is a "profound realization that mouth hygiene cannot be neglected" in the scheme of things to come—that it is a small but important part of the general hygiene.

Standing alone, the lack of mouth hygiene presents a staggering problem among all classes from pre-school age to adult. Modern dentistry emphasizes the early care for the prevention of dental defects. Yet in spite of the influence exerted by dentist in private practice there still remains this scourge of unhygienic mouth conditions in society.

It can be seen that man without knowledge is almost helpless. Knowledge of dental caries and disease would give him control over the state of

his mouth to a large degree. Mere knowledge of itself is not sufficient; there must be application of that knowledge in a practical way. That there is a lag in the application of knowledge is more true today than it ever was in the past. The gap, furthermore, is widening because of the rapidity with which knowledge has grown in recent years. It can, however, be narrowed considerably if medical information continues to seep down to the unenlightened. The acceptance of a responsibility for the dissemination of dental health information marks a step of dental progress.

The creation of the dental hygienist was one of the outcomes of this need. The dental hygienist because of her training is of actual service in the field of preventive dentistry and dental health education program. The training is built around a progressive series of integrated courses of a scientific nature comprehensive in their scope and outlook and designed to prepare the student to take on new facts as they are discovered and to utilize them in protecting and instructing those under her care.

The role of the dental hygienist, then, can be indirectly tied up with the dynamic forces operating in society to bring about social and scientific progress. Every dental hygienist is urged to "have her mind open to everything that is progressive." With that as her watch word she can assuredly find her niche in the progress of the world events and be inspired with the highest ideals. Her position, therefore, in society is not without significance if viewed in the larger sphere of health conservation and all that it means to social welfare and in its benefits to mankind. Her contribution toward a "Healthy Citizenry" is indispensable because it is the field of the dental hygienist to improve mouth conditions and in so doing she is also promoting general hygiene.

—Hilda Penner.

A FOND FAREWELL OF THE CLASS OF '39

Our days at Columbia
Are now at an end;
Due thanks and best wishes
Midst tears do we send,
To all our instructors
Who during the year
Showed kindness and interest
To each of us here.

We came to these portals
With an anticipation,
This in turn yielded
To a determination.
Yes determined were we
To succeed in this course
For we wanted to come here
We needed no force.

On those first days of school
There was many a sigh
And indeed we were frightened
When exam days drew high!
One thought gave us courage
Dismissed all our fear
That thought was a dream
Of our future career.

The weeks and the months
Whirled into the past
It hardly seems possible
That our year went so fast.
Now Hygienists are we!!
The name sounds so grand!
Fifty-two more crusaders
For a healthier land.

Farewells we must say,
Dear Classmates adieu
We wish you success
And happiness too.
Onward through life
May this class always shine
As the Columbia Hygienists
Of Nineteen thirty-nine.

—Mary Bernadette Ledwith.

Graduation Memories

The great night had finally arrived. Fifty two girls marching proudly down the aisle. Smiling lips—shining eyes. A happy song in every heart. Proud, loving parents watching. . . . A stillness ascended on the hall . . . one by one each girl receiving her blue and purple bands. . . .

Singing. . . . Excitement . . . then again quietness . . . tenseness.

Proud, worthy girls receiving their awards.

Fifty-two pairs of eyes just a little misty. . . . Incidents pleasant and unpleasant, passing fleeting through each mind. A little ache in each heart . . . a little catch in each throat . . . words can not express this strange feeling.

The school year is over. Full fledged dental hygienists marching back up the aisle. Thrilled!! Quiet! Excitement!!

Proud parents . . . proud instructors . . . proud girls.

It is over! Sad farewells . . . promises to meet again.

Oh, it was all so long ago. . . . Do you remember?

—Margaret Carroll.

My First Examination

I walk down the long silent corridor of floor F. . . . My feet lag . . . my heart beats against my ribs. Do I know it? Have I studied enough? Words . . . Symbols . . . and pictures dance around in my brain putting it in a state of chaos. My hands are cold, my forehead hot. Unconsciously my lips move in mute utterance repeating unconnected phrases. I enter Amphitheater F and in a daze I sit down and look unseeingly at the blue essay books and white examination sheets. Terror sweeps over me as Miss Overbeck starts up the aisle. She is at my seat. I have the book and paper now. My pencil is poised I shut my eyes and send a prayer to Heaven . . . I look at the questions one, two, three, four, five, six—suddenly relief and joy flood my soul. I know the answers.

After writing along, the answers down, I hand in my paper and as I walk out into the same corridor my head is high, my heart warm and I wear a smile. I chuckle and say to myself—it's always darkest before the dawn.

—Blanche Chamberland.

Commencement

On this day we do not only commemorate the end of a most delightful year, but also our entrance into the field of Oral Hygiene. This field like several others has developed from a marked individual and has now expanded throughout several countries. Thus far Oral Hygiene has been disregarded as the high standing profession that it should be, but we, as Dental Hygienists, desire to contribute our knowledge so readily that in future years Oral Hygiene shall be recognized even more readily by the public than at present. By gaining the confidence of the people in us, Oral Hygiene will be spread to a larger and more acknowledged field.

We have chosen our profession carefully and have devoted ourselves diligently to this work so that most of us may now look forward to the road to success. As Dental Hygienists we hope to fulfill successfully the object of our ideals. In our work there will be terror and pleasure, thrills and chills, but those shall be overshadowed when we consider the distinct value of this field. And so with pleasant memories of this past year, we shall look forward to our adventurous and broadening activities of the future.

—Marion Demarest.

The First Day of Clinic

Nine o'clock! We stood there, tables set . . . waiting . . . wondering and happy. Up and down the two rows of chairs in clinic H, and our faces turned toward the desk. Patients kept coming. Whose turn now? Fidgeting around in nervous anxiety each one's remark was, "I wonder if I shall get a patient?" . . . Ten after nine . . . some had started work . . . all had started by ten. Working, our nervousness was forgotten, our minds intent upon completing our task. Scaling first . . . number seven and eight. . . . Yes, even thirteen and fourteen. Time passed. . . . Velvite was mixed . . . disclosing solution was applied to the teeth . . . polishing began. By twelve our patients had been inspected by the instructor and dismissed. Fearfulness had been wrought for naught! Do you remember?

—Lillian Finch.

The Dental Hygienist — A Public Health Educator

Dental caries and gingival complications, the most prevalent diseases that man is heir to, are still raging unabated not because as in the case of other diseases the cure is undiscovered, but because the public has not awakened to the fact that these can be controlled and eliminated through the individual's own efforts and the help of the dentist and hygienist. He must be taught from early childhood that a clean mouth, a balanced diet, and a well-formed arch; and as a result, good health and beauty are within his reach if he follows a few simple precautions. It is not that the individual is indifferent to his own family's health and appearance, but rather that he has not been sufficiently impressed with the fact that his dental ailments are preventable and curable. And this is where the dental hygienist can best function. She is well equipped to disseminate this knowledge patiently and repeatedly to whomever she contacts whether it be in the school, in a public institution, or in a private office.

Great progress has already been made in the public schools through the inspection of the children's teeth twice a year, notification to the parents of the defects found, and follow-up work to remedy them. Everybody regrets that the present economic recession has hampered the fulfillment of the goal of health officials—a dental clinic in every school. Grim realities must be faced, however, and the dental hygienist must use the available facilities to the pupil's best advantage. Her work necessarily falls into two categories, namely, that of impressing young pliable minds with the necessary information of correct diet rich in calcium and phosphorus, of the proper method of brushing the teeth and of periodic visits to the dentist; and secondly, the translation of this knowledge into the establishment of correct dental habits. In presenting her material, the hygienist must be able to use the most progressive pedagogic methods now available. This would include projects and activities closely correlated with subjects now taught in the

curriculum. Besides regularly arranged lectures, slides and motion pictures should be shown both in the classroom and the auditorium. Parents can best be contacted through mothers clubs and parent-teachers associations. Moreover, every hygienist does follow-up work by visiting the home. What a wonderful opportunity to make every such visit a lesson on dental hygiene. It is evident, therefore, that the dental hygienist in the schools can and should be a dental health educator and not merely an assistant to the dentist.

The work of the hygienist in a public institution is similar to the work done in a private office with the added problem of educating people of limited means. The teeth of patients coming for treatment are in a far worse condition since many of them have an insufficient and an improper diet and badly neglected mouths. The dentist gives much of his time and skill in curative and restorative measures to those who have financial difficulties. It is up to the hygienist to supplement his work with proper instruction to promulgate the necessary knowledge so that the patient can practice preventative dentistry.

It is evident that the dental hygienist in any of the above capacities contacts thousands of children and adults either directly or indirectly and only in this widespread education will results be attained. She must be prepared at all times to converse intelligently on any phase of dental hygiene. Since many people resent instruction per se, a well informed hygienist can effectively impart information informally in the natural course of a discussion or conversation. If in this way, the public develops a "tooth consciousness," the community will be greatly benefited. It will suffice to say that the prime necessities for the prevention and elimination of the common dental ills lie in eternal vigilance and constant repetition of correct hygienic information.

—Mildred Scharf.

FAREWELL . . .

We who have learned the fundamental process of a craft, wish with eagerness to accomplish successfully the object of our hopes. This object plays an important part in the dental profession. If we accomplish successfully the object of our hopes, we experience a thrill of pride in our exhibition. It has been with great joy and pleasure that we have worked to accomplish something that means so much to not only us, but to the world. Few people realize how important Oral Hygiene is to them and it is our object to impress upon them the real significance. Now as the year draws to a close we begin to realize that it is not the end but the beginning. As we close this book we may also be closing a door, gently but firmly, upon a certain phase of our life. The closing of this door may mean the ending of old friendships we so fondly cherish and the beginning of new friendships made possible through our work. For years we have planned our lives and have had several ambitions which gradually worked up to the important goal we have reached. We are now going forward, eager and unafraid — the future is ours.

—June Gorman.



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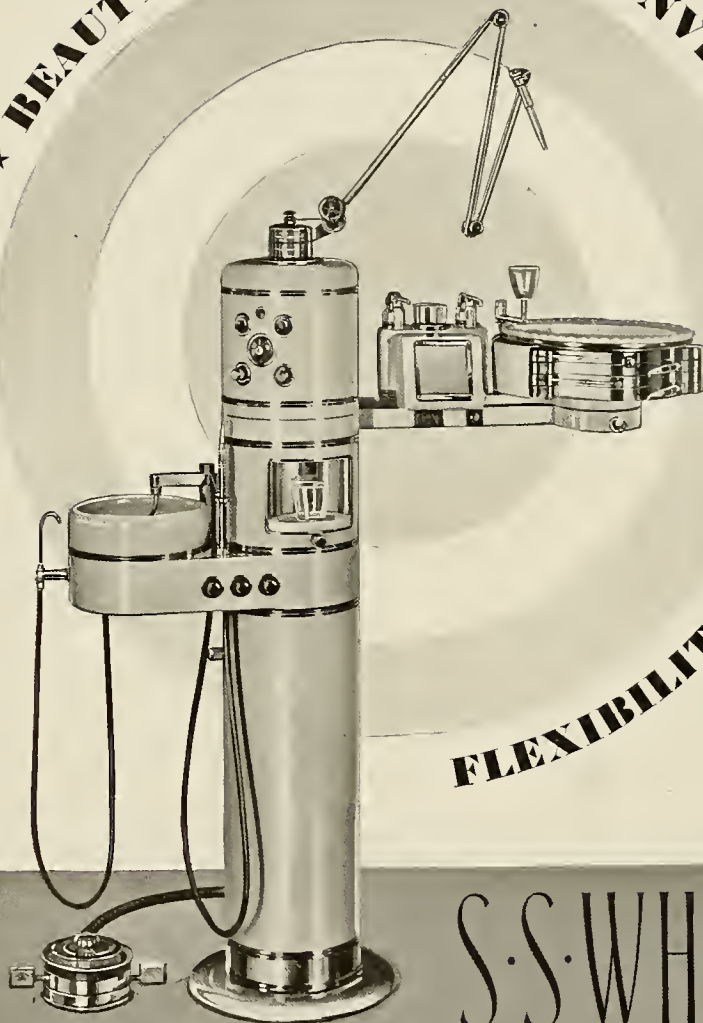


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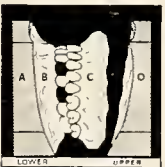
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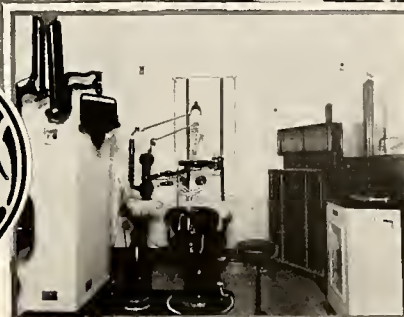


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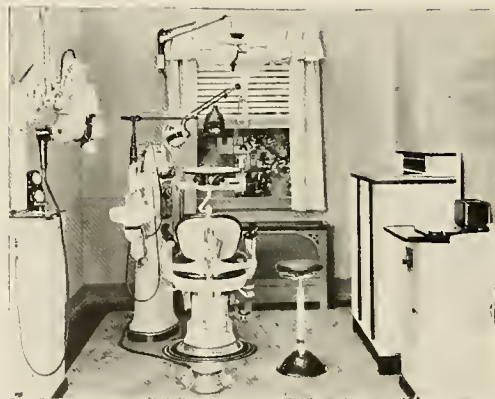
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